



FEDERAL SIGNAL VAMA

Protecting people and our planet

PRICE LIST **2018**

Emergency Service Equipment



Federal Signal Vama, European market leader for Emergency Warning Systems, offers integrated solutions for police, ambulance, fire, rescue and service vehicles market.



WWW fedsigvama.com



FederalSignalVama



Federal Signal VAMA, S.A.



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+FederalSignalVama



WHO ARE WE?

Federal Signal Corporation (FSC, with website www.federalsignal.com) designs and manufactures a suite of products and integrated solutions for municipal, governmental, industrial, and commercial customers under a variety of recognized brand names.

Environmental Solutions (ESG) that offers environmental solutions due to its complete product range (Vacuum trucks, sewer cleaners, hydro-excavators, street sweepers, waterblasters etc.) and **Safety and Security Systems (SSG)** are the two business groups that belongs to FSC.

SSG has the following divisions:

Integrated Warning Systems for Emergency vehicles (Public Safety Systems, PSS), Indoor and outdoor mass warning and notification systems division (Integrated Systems), Signaling products and mining and electrical safety equipment division.

Federal Signal Vama (FSV), belonging to PSS division, serves these Emergency Warning Systems in the European markets, which offers integrated solutions for Police, Ambulance, Fire, Rescue and Service markets. Furthermore, we install and make transformations to all kinds of emergency and service vehicles. Our large range of products and services together with our engineering and manufacturing flexibility ensure we are able to customize the solution expected by each customer.

FSV leading engineering and manufacturing capabilities have resulted in the most dependable emergency warning equipment available in Europe.

Innovative engineering and skilled workmanship have earned FSV a reputation for quality and performance appreciated by the customers we serve throughout Europe.

OUR MISSION

Providing Products and Services to Protect People and Our Planet.

OUR VALUES

We operate with the highest principles and deliver results through customer focus, innovation, continuous improvement, teamwork and investing in our people.



WHERE ARE WE?

European central office

- Vilassar de Dalt - Barcelona (Spain)

Production plants in Europe

- Vilassar de Dalt - Barcelona (Spain)

- Bytom (Polonia)

Comercial office (Central administration)

- Madrid (Spain)



FACILITIES

Federal Signal Vama is a company founded in 1969, pioneering the concept of police cars as we know them today. In 1992 it was acquired by the Federal Signal Corporation Industrial Group, a world leader in warning systems, which is listed on New York stock exchange. Federal Signal Vama became the European market business unit responsible for the emergency sector (Police, Fire and Ambulance) and services (Heavy Duty).

With important annual investments to develop new products, the engineering department can offer integrated solutions for all end user requirements. Because of Federal Signal Vama employee's constant development and innovation Federal Signal Vama has built an excellent reputation for quality and performance that is appreciated by customers all over Europe.

INGENEERING AND R+D

Federal Signal Vama's R and D department comprises a team of engineers divided in three technical categories; **software, electronics and mechanics**. This way, Federal Signal Vama offers integrated hardware and software solutions to enable the management of all the communications systems in the emergency and service vehicles.

A 3D printer allows the rapid development of prototypes in the early stages of the product development project. Thanks to this, Federal Signal Vama's engineers can check that the project is practical and the product is suitable for its intended market. Market information is collected both by marketing and commercial departments.

QUALITY

The Quality department does a variety of tests and checks to ensure the products meet the level of quality expected by the European market, Federal Signal Vama's main market place. These tests include life tests, vibration, temperature, humidity and many more, to ensure the applicable legal requirements; among them those included in Regulation R65 relating to colour, light intensity and flash patterns and Regulation R10 of Electromagnetic Compatibility. This high level of quality has lead to Federal Signal Vama achieving ISO 9001, ISO 14001 and UCA (Automobile Certification Unit).



PRODUCTION LINE

With two production facilities (one in Poland and one in Barcelona, Spain), Federal Signal Vama achieves a leadership and manufacturing capability that leads to a high reliability in its emergency warning systems, one of its highlights.

Our Barcelona manufacturing facility covers 7,500 square meters. Within this is our printed circuit production area utilizing Pick and Place robots, mounting components directly onto multilayer printed circuit boards. Final soldering in a convection oven is also fully automated.

Once the printed circuit boards have been checked, they have a protective varnish applied to ensure protection from adverse climatic conditions and to help to achieve an excellent performance.

Federal Signal Vama produces more than 400,000 wiring harnesses every year, using over 1,400,000 meters of electrical cable. Wiring harnesses are designed to assist installation into the emergency vehicle. All wiring harnesses are manufactured using electrical cables matched to the electrical loads and fitted with appropriate connectors.

Our lightbar production lines supply lightbars to all Europe. Federal Signal Vama manufactures more than 10 different lightbar platforms, among these, Valor lightbars with its "V" form, which reduces the risk and increases the emergency vehicle security at intersections, or the Traffic Storm lightbar, that includes a foldable LED panel, providing additional information in emergency situations. Each lightbar model is designed to meet the requirements of the different European markets.

The **grill light assembly area** produces lights using the latest LED technology, taking a special care in lights' sealing, to ensure perfect waterproof products when required.

In the special production area the well known Prisoner Kits are manufactured. This system converts the rear passenger area of a police vehicle into a secure area for the prisoner, while ensuring the safety of the police officers. A thermo forming machine manufactures the different elements included on the kit, like the separated shield and the rear seats, with a 5 axis CNC machine which finishes the process and gives the final and distinctive appearance.

In the mechanical workshop a computer programed punching machine starts the manufacture of the metal housings.

The **metal housings** then continue to a computer programmed bending machine which finishes the product ready for final assembly.

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ABOUT THE PRICE LIST 2018

- Products are classified according to their categories (main warning lights, supplemental warning lights, internal warning lights, area lighting, sirens & audible warning, controllers and accessories).
- Within each category, products are grouped in families or Series.
- **N** NEW indicates a new entry in the Price List.
- For each product the Reference number (#), model and description are shown. Product reference numbers are the same as those used in our business system. Please order the product by its corresponding reference number.
- Lightbar options cannot be bought separately from the lightbar.
- For a proper and safe installation and operation, remember to read all installation manuals carefully.
- Effective from: 01.02.18
- Validity until: 31.12.18

* Provided information about price, product, dimensions, features and specifications could be subject to change without notice.

NEWS 2018



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ACCESORIES

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Sales conditions

(1) AGREEMENT AND LIMITATIONS. The agreement between Seller and Buyer (the "sales contract") with respect to the sale of goods (the "goods") described on the other side hereof shall consist of the terms appearing hereon and on the other side hereof together with any additions or revisions of such terms mutually agreed to in writing by Seller and Buyer. Seller objects to and shall not be bound by any additional or different terms, whether printed or otherwise, in Buyer's purchase order or in any other communication from Buyer to Seller unless specifically agreed to by Seller in writing. Except as expressly stated in the sales contract, no reference to Buyer's purchase order or other communication from Buyer shall be deemed to incorporate by reference any terms appearing therein. The sales contract shall be for the benefit of Seller and Buyer and not for the benefit of any other person. Prior courses of dealing, trade usage and verbal agreements not reduced to a writing signed by Seller, to the extent they modify, add to, detract from, supplant or explain the sales contract, shall not be binding on Seller.

(2) TERMINATION OR MODIFICATION. The sales contract may be modified or terminated only upon Seller's written consent except that stenographic and clerical errors are subject to correction by Seller or upon Seller's written consent. If Seller shall declare or consent to a termination of the sales contract, in whole or in part, Buyer, in the absence of contrary written agreement signed by Seller, shall pay termination charges based upon expenses and costs incurred in the production of the goods or in the performance of the services to the date such termination is accepted by Seller including, but not limited to, expenses of disposing of materials on hand or on order from suppliers and the losses resulting from such disposition, plus a reasonable profit. Notwithstanding the foregoing any goods substantially completed or services performed on or prior to such termination shall be accepted and paid for in full by Buyer.

(3) PRICE AND PAYMENT. Prices are subject to increase by Seller based on Seller's prices in effect at the time of shipment in all instances where specified shipment date is later than 30 days from date of order. Unless otherwise specified in the sales contract or Seller's applicable price list, prices are EXWORKS. Seller's point of shipment, and the terms of payment are NET 30 days from the date of invoice. If the sales contract is for more than one unit of goods, the goods may be shipped in a single lot or in several lots at the discretion of Seller. In such event each such shipment shall be paid separately and Buyer shall be responsible for all transportation charges. Seller may require full or partial payment or payment guarantee in advance of shipment whenever, in its opinion, the financial condition of Buyer so warrants. Payment by credit card may be subject to a service charge.

(4) PAST DUE INTEREST. Amounts not paid when due shall be subject to past due interest at the rate of 18% per year or the highest rate permitted by law, whichever is less.

(5) RISK OF LOSS. The risk of loss or the goods or any part thereof shall pass to the buyer upon delivery thereof by Seller to the carrier. Buyer shall have sole responsibility for processing and collection of any claim of loss against the carrier.

(6) TAXES. Prices do not include taxes. Buyer shall pay Seller, in addition to the price of the goods, any applicable excise, sales, use or other tax (irrespective of how it is designated) imposed upon the sale, production, delivery or use of the goods ordered to the extent required or not forbidden by law to be collected by Seller from Buyer, whether or not so collected at the time of the sale, unless valid exemption certificates acceptable to the taxing authorities are furnished to Seller before the date of invoice.

(7) DELIVERY. Promises of delivery from stock are subject to prior sale. Delivery dates are not guaranteed but are estimated on the basis of immediate receipt by Seller of all information to be furnished by Buyer and the absence of delays, direct or indirect, resulting from or contributed to by circumstances beyond Seller's reasonable control. Seller shall in good faith endeavour to meet estimated delivery dates but shall not be liable to Buyer for any damages as a result of any delay caused or contributed to by circumstances beyond Seller's reasonable control.

(8) DEDUCTIONS AND RETURNS. A Return Material Authorization (RMA) must be obtained before returning merchandise for credit. Returns are subject to 20% or more restocking charges unless otherwise agreed upon at the time RMA is issued. All returns are subject to inspection of merchandise and any defects in the units will be charged back to the Buyer at the cost of parts and labour. Credit deductions will not be honoured unless covered by a credit memorandum. Goods shipped to the Buyer may be returned to Seller for credit only upon the Seller's prior written consent (such consent to be in the sole discretion of Seller) and upon terms specified by Seller, including prevailing restocking, freight, and handling charges. Buyer assumes all risk of loss for such returned goods until actual receipt thereof by Seller. Seller representatives are not authorized to accept, returned goods or to grant allowances or adjustments with respect to Buyer's account. We don't accept returns of special products developed under customer requirements, as well as lightbars or prisoner transport kits. Federal Signal Vama only accepts product returns shown at product guide, general price list or spare parts list, and for a period of 2 years starting from the product manufacturing date.

(9) INSPECTION. Buyer shall inspect the goods immediately upon the receipt thereof. All claims for any alleged defect in Seller's performance under this sales contract, capable of discovery upon reasonable inspection, must be fully set forth in writing and received by Seller within thirty days of Buyer's receipt of the goods. Failure to make any such claim within said thirty-day period shall constitute a waiver of such claim and an irrevocable acceptance of the goods by Buyer.

(10) LIMITED WARRANTY. Federal Signal Vama, S.A.U warrants each new product to be free of defects in material and labor cost, under normal use and service, for a period of two years from the manufacturing date unless different enterprise communication supports (product bulletins, product guides, price lists, email communications, etc.) stated otherwise. All products have been subjected to abuse, misuse, extraordinary work conditions, inadequate maintenance or installation, or its use, maintenance or installation are different from user's manual are excluded of this warranty. Lamps, flash tubes, or batteries are not covered under warranty as well. During this warranty period, the obligation of Federal is limited to repairing or replacing, as Federal may elect, any part or parts of such product which after examination by Federal discloses to be defective in material and/or workmanship. The customer will return by RMA the defective part for analysis and verification in a period of one month maximum. Federal reserves the right to charge the product and transport if the defective parts after examination by Federal don't discloses to be defective in material and/or workmanship, or in the case of not receiving the defective product part for analysis when this product has been replaced in warranty. Only in case of reparation or substitution of any product part is impossible, or when the product can't recover its function or former quality through the reparation or substitution, Federal Signal Vama S.A.U. could refund the purchase price paid for its distributors or professional customers to them. Except for specific circumstances, reparations under this warranty have to be done by Federal Signal Vama S.A.U.'s authorised Service Centres. If this reparation can't be done at authorised Federal Signal Vama S.A.U Service Centres and the product has to be repaired in other place, the distributor or professional customer has to paid all Federal Signal Vama S.A.U or SAT personnel's travel expenses and living allowances. This warranty covers all expenses relating to assembly and disassembly, and labour of the defective part, according to current price list communicated by Federal Signal Vama S.A.U. If distributor or professional customer decides to send to Federal Signal Vama S.A.U. in order to repair it, this warranty covers shipment expenses of the repaired or substituted part by regular shipment from Federal Signal Vama S.A.U. to the distributor or professional customer. Shipment expenses of supposedly defective part from distributor or professional customer to Federal Signal Vama S.A.U. have to be paid by distributor or professional customer. Repaired or substituted parts have got a (3) three months warranty or they have got the remaining warranty time from the part applied, if this is greater. Federal Signal Vama S.A.U. not offers any other warranty, whether explicit or implicit, including (but not limited) any implicit warranty for a commercial or suitable specific purpose. Under any circumstance Federal Signal Vama S.A.U. has to be responsible for possible benefit losses or direct damages resulting from defective material or manufacturing products. This commercial warranty is applicable without prejudice to current customer protection or legal warranties laws.

(11) PATENTS. Seller shall hold Buyer harmless, to the extent herein provided, against any rightful claim of any third person stating that the goods, under the same conditions as they left the factory, infringe any United States and/or European Union patent. However, if the Seller followed Buyer's instructions in that respect, the Buyer shall hold Seller harmless from any claim arising from the compliance with such instructions. Seller's acceptance in this paragraph to hold Buyer harmless shall not apply to any infringement consisting of the use of goods manufactured by Seller as a part of any combination with goods manufactured by Buyer or others. In the event of any claim of infringement in respect of any goods manufactured by Seller and the subsequent prohibition of use, Seller, if unable within a reasonable time to secure for Buyer the right to continue using such goods, either by suspension of the injunction, by providing for Buyer a license, or through other ways, shall either replace such goods with non-infringing goods or modify such goods so that they become non-infringing or accept the return of the prohibited goods and refund the purchase price paid by Buyer less allowance for any period of effective use. Except as in this paragraph provided, Seller makes no warranty that the goods will be delivered free of the rightful claim of any third person by way of infringement or the like and Buyer's remedies will be limited to those provided in this paragraph.

(12) ASSIGNMENT AND DELEGATION. No right or interest in this sales contract shall be assigned by Buyer without Seller's prior written consent, and no delegation of any obligation owed, or of the performance of any obligation, by Buyer shall be made without Seller's prior written consent. Any attempted assignment or delegation shall be void and totally ineffective for all purposes unless made in conformity with this paragraph 9, 10 and 11 hereof, and if effective shall be subject to all limitations of this sales contract.

(13) SEVERABILITY. If any term, clause or provision contained in the sales contract is declared or held invalid by a court of competent jurisdiction, such declaration or holding shall not affect the validity of any other term, clause or provision herein contained.

(14) INSTALLATION. Installation shall be provided and shall be paid for by Buyer unless otherwise specifically stated on the sales contract.

(15) GOVERNING LAW AND LIMITATIONS. The formation and performance of the sales contract shall be governed by the laws of Spain. Any action for breach of the sales contract or any covenant or warranty contained herein must be commenced within the term of one year after breach of agreement has occurred.

(16) MINIMUM ORDER. With the aim to increase our customer service level and efficiency, we will establish a minimum customer order amount of 75 €. We would not be able to manage orders below that amount. Do not hesitate to contact our customer service for further information.

MAIN WARNING LIGHTS

- ▶ **Lightbars.....6**
- ▶ **Mini lightbars.....36**
- ▶ **LED beacons.....38**
- ▶ **Strobe beacons.....44**
- ▶ **Halogen beacons.....45**
- ▶ **Others.....46**



BIFROST Series

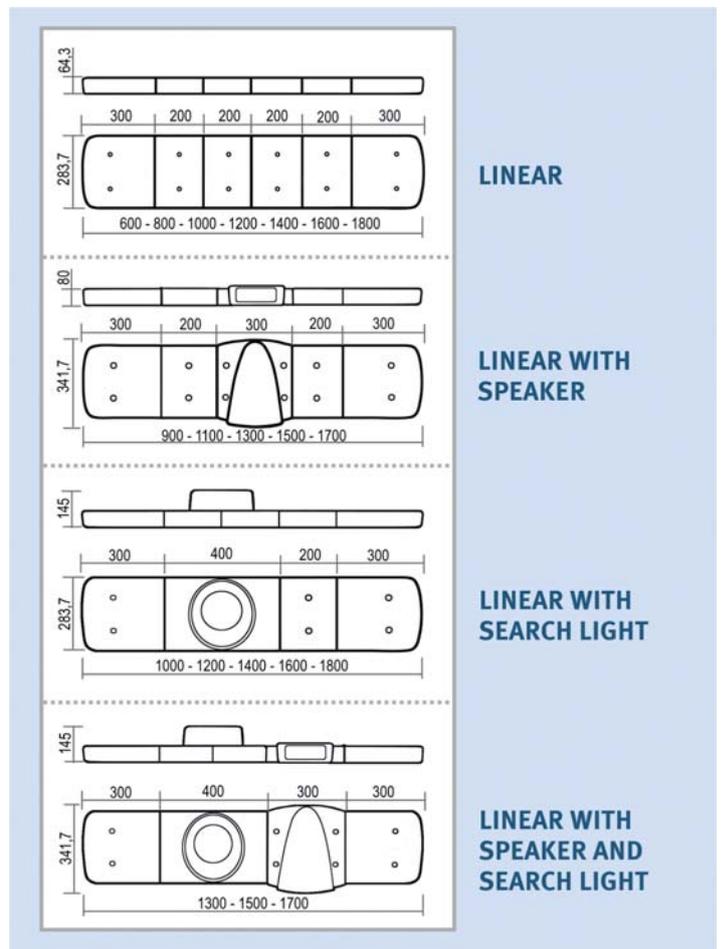
FEDERAL SIGNAL VAMA presents the new **BIFROST lightbar Series** with LED technology, low profile and aerodynamic design. It allows to integrate a 100W speaker, a 100W siren-amplifier AS600 series and a LED searchlight, becoming the most versatile low profile lightbar on the market.

Its design is completely modular and flexible, both in its structure and different LED modules, allowing a quick replacement of each module. It has multiple lighting options: main lights and extension lights with cruise function, illuminated sign, SignalMaster KS, front, rear and / or lateral work lights and independent flashing lights among others.

Additionally, the different lower bases and upper lenses are configurable: Spreader or Smooth lower base, available in blue, amber, red and clear. The upper lenses are available in blue, amber, red and clear.



Bifrost lightbar Series dimensions in mm.





REF.	MOD.	DESCRIPTION	EURO
CONFIGURABLE SYSTEM (specify options)			
Basic lightbar			
	BI-B600	Bifrost series lineal lightbar, base 600 mm, wiring harness, bitension	275,00
	BI-B800	Bifrost series lineal lightbar, base 800 mm, wiring harness, bitension	400,00
	BI-B1000	Bifrost series lineal lightbar, base 1000 mm, wiring harness, bitension	525,00
	BI-B1200	Bifrost series lineal lightbar, base 1200 mm, wiring harness, bitension	650,00
	BI-B1400	Bifrost series lineal lightbar, base 1400 mm, wiring harness, bitension	775,00
	BI-B1600	Bifrost series lineal lightbar, base 1600 mm, wiring harness, bitension	900,00
	BI-B1800	Bifrost series lineal lightbar, base 1800 mm, wiring harness, bitension	1.025,00
Basic lightbar with speaker			
	BI-B900SPK	Bifrost series lineal lightbar, base 900 mm, wiring harness, bitension, with speaker	1.025,00
	BI-B1100SPK	Bifrost series lineal lightbar, base 1100 mm, wiring harness, bitension, with speaker	1.150,00
	BI-B1300SPK	Bifrost series lineal lightbar, base 1300 mm, wiring harness, bitension, with speaker	1.345,00
	BI-B1500SPK	Bifrost series lineal lightbar, base 1500 mm, wiring harness, bitension, with speaker	1.475,00
	BI-B1700SPK	Bifrost series lineal lightbar, base 1700 mm, wiring harness, bitension, with speaker	1.595,00
Basic lightbar with search light			
	BI-B1000FB	Bifrost series lineal lightbar, base 1000 mm, wiring harness, bitension, with search light	873,00
	BI-B1200FB	Bifrost series lineal lightbar, base 1200 mm, wiring harness, bitension, with search light	990,00
Basic lightbar with speaker and search light			
	BI-B1300SPFB	Bifrost series lineal lightbar, base 1300 mm, wiring harness, bitension, with speaker and search light	1.523,00
	BI-B1500SPFB	Bifrost series lineal lightbar, base 1500 mm, wiring harness, bitension, with speaker and search light	1.625,00
(*) Mounting kit is not included in price and must be ordered separately.			
CAN BUS OPTIONS			
Lighting options - Priority lights			
	BI-SLR65	Blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) or red (Approved UN R65 class 1). with cruise light, day / night and lamp failure detector	905,00
	BI-SLR65-BIC	Bicolour blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) and/or red (Approved UN R65 class 1). with cruise light, day / night and lamp failure detector	1.069,00
Lighting options - Secondary lights			
	BI-SLE3	Module of (3) Solaris LEDs with parabolic reflector, blue, amber, red or white light	95,00
	BI-SLE3-BIC	Bicolour module of (6) Solaris LEDs with parabolic reflector, blue, amber and/or, red. Only available as bicolor extension lights and/or monocolour extension light plus SignalMaster.	115,40
	BI-RE	Option only (1) reflector without LED	6,35
Sign options			
	BI-CIL2	(1) Front and back LEDs sign module	consult
	BI-AD	Self-adhesive vinyl for illuminated sign, front and back, with or without text	consult
Acoustic options			
	AS600-CB	100W AS600 CAN BUS siren amplifier, 1 auxiliary output synchronized with priority lights, 1 tacograph output, connection to horn and radio, attenuator option according to control head, 10-30v. Does not include public address.	395,00
	8235984AUD PA-CB12	Public Address kit with remote control. Volume and microphone functions control (for CAN BUS AS600 siren amplifier) (BCT2000 and BCT3000 control heads) 12V	73,33
	82351038AUD PA-CB24	Public Address kit with remote control. Volume and microphone functions control (for CAN BUS AS600 siren amplifier) (BCT2000 and BCT3000 control heads) 24V	73,33
Control heads			
	BCT2004	BCT2000 Series control head, 4 control keys.	119,38
	BCT2006	BCT2000 Series control head, 6 control keys.	127,34
	BCT2010	BCT2000 Series control head, 10 control keys.	142,12
	BCT2015	BCT2000 Series control head, 15 control keys.	158,60
	BCT2021	BCT2000 Series control head, 21 control keys.	199,53
	BCT500CB	BCT500CB Series control head. 13 control keys (public address included)	344,88

(*) The current BCT500CB series control heads are not compatible with the Bifrost Series. The valid control heads must include in their reference -AUD.

(**) Bifrost series CAN BUS lightbars of Federal Signal Vama are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.

REF.	MOD.	DESCRIPTION	EURO
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ANALOGIC OPTIONS

Lighting options - Priority lights

	BI-SLR65	Blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) or red (Approved UN R65 class 1) with cruise light and day / night.	750,00
	BI-SLR65ADF	Blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) or red (Approved UN R65 class 1) with cruise light, day / night and lamp failure detector	775,00

Lighting options - Secondary lights

	BI-SLE3	Module of (3) Solaris LEDs with parabolic reflector, blue, amber, red or white light	85,00
	BI-RE	Option only (1) reflector without LED	6,35

Sign options

	BI-CIL2	(1) Front and back LEDs sign module	52,00
	BI-AD	Self-adhesive vinyl for illuminated sign, front and back, with or without text	5,40

Signalmaster options

	BI-SML6-KS	SignalMaster Solaris, directional lighting system, (6) modules (3) LEDs with parabolic reflector, control head, red, amber or blue colour	576,32
	BI-SML8-KS	SignalMaster Solaris, directional lighting system, (8) modules (3) LEDs with parabolic reflector, control head, red, amber or blue colour	711,90

Acoustic options

	AS600-AN	100W AS600 Integrated Analogic siren amplifier, 1 auxiliary output synchronized with priority lights, 1 tacograph output, connection to horn and radio, lamp failure and/or attenuator option, 10-30v. Does not include public address.	375,00
	8235970 PAC-AN	Public Address kit with remote control. Control of priority lights and siren, PTT for public address and volume control 12-24V	105,00
	8235685 PA-AN	Public Address kit with remote control. PTT for public address and volume control 12-24V	85,00

MOUNT OPTIONS

	8234174 LGD/FP	Permanent mounting bracket	101,86
	BI-FB	Metal mounting kits on bars (contact our sales department for available models)	consult
	8234189 BI-FM	Magnetic mount, Bifrost 600mm	103,98
	A-CT23	Roof connector, 23-ways	99,34
	4004536	Cover for lineal lightbars, 1100mm. (44")	26,90



Bifrost Lineal

BIFROST

LED lightbar



Bifrost-V

✓ **BICOLOUR** 

✓ Modular LED technology

✓ Low profile and aerodynamic design

✓ Built-in siren and speaker



BIFROST-V Series

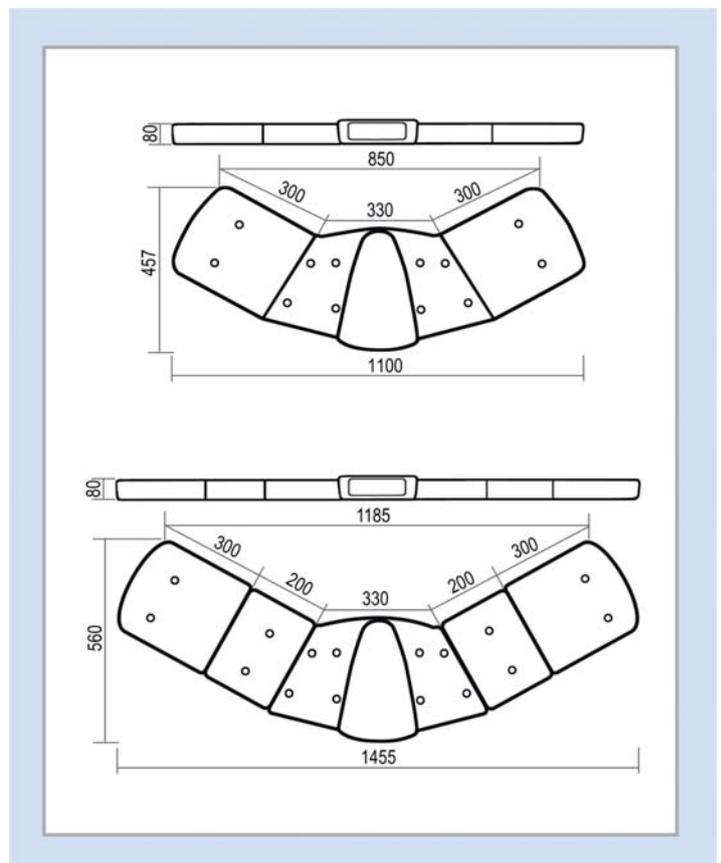
Federal Signal Vama presents the new **BIFROST-V** lightbar Series with LED technology, low profile and aerodynamic design. Its V-shape design offers a greater efficiency in emergency situations and risk reduction in the intersections. It allows to integrate a 100W speaker and a 100W siren-amplifier AS600 series.

Its design is completely modular and flexible, both in its structure and different LED modules, allowing a quick replacement of each module. It has multiple lighting options: main lights and extension lights with cruise function, illuminated sign, SignalMaster, front, rear and / or lateral work lights and independent flashing lights among others.

Additionally, the different lower bases and upper lenses are configurable: Spreader or Smooth lower base, available in blue, amber, red and clear. The upper lenses are available in blue, amber, red and clear.



Bifrost-V lightbar Series dimensions in mm.





REF.	MOD.	DESCRIPTION	EURO
CONFIGURABLE SYSTEM (specify options)			
Basic lightbar			
	BI-B1100V	Bifrost series V-shape lightbar, base 1100 mm, wiring harness, bitension	750,00
	BI-B1500V	Bifrost series V-shape lightbar, base 1500 mm, wiring harness, bitension	975,00
Basic lightbar with speaker			
	BI-B1100VSPK	Bifrost series V-shape lightbar, base 1100 mm, wiring harness, bitension, with speaker	1.220,00
	BI-B1500VSPK	Bifrost series V-shape lightbar, base 1500 mm, wiring harness, bitension, with speaker	1.545,00
CAN BUS OPTIONS			
Lighting options - Priority lights			
	BI-SLR65V	Blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) or red (Approved UN R65 class 1) with cruise light, day / night and lamp failure detector	1.175,00
	BI-SLR65V-BIC	Bicolour blue LEDs Priority lights (Approved UN R65 class 1), amber (Approved UN R65 class 1) and/or red (Approved UN R65 class 1) with cruise light, day / night and lamp failure detector	1.379,00
Lighting options - Secondary lights			
	BI-SLE3	Module of (3) Solaris LEDs with parabolic reflector, blue, amber, red or white light	95,00
	BI-SLE3-BIC	Bicolour module of (6) Solaris LEDs with parabolic reflector, blue, amber and/or, red. Only available as bicolor extension lights and/or monocolour extension light plus SignalMaster.	115,40
	BI-RE	Option only (1) reflector without LED	6,35
Sign options			
	BI-CIL2	(1) Front and back LEDs sign module	consult
	BI-AD	Self-adhesive vinyl for illuminated sign, front and back, with or without text	consult
Acoustic options			
	AS600-CB	100W AS600 CAN BUS siren amplifier, 1 auxiliary output synchronized with priority lights, 1 tacograph output, connection to horn and radio, attenuator option according to control head, 10-30V. Does not include public address.	395,00
	8235984AUD PA-CB12	Public Address kit with remote control. Volume and microphone functions control (for CAN BUS AS600 siren amplifier) (BCT2000 and BCT3000 control heads) 12V	73,33
	82351038AUDPA-CB24	Public Address kit with remote control. Volume and microphone functions control (for CAN BUS AS600 siren amplifier) (BCT2000 and BCT3000 control heads) 24V	73,33
Control Heads			
	BCT2004	BCT2000 Series control head, 4 control keys.	119,38
	BCT2006	BCT2000 Series control head, 6 control keys.	127,34
	BCT2010	BCT2000 Series control head, 10 control keys.	142,12
	BCT2015	BCT2000 Series control head, 15 control keys.	158,60
	BCT2021	BCT2000 Series control head, 21 control keys.	199,53
	BCT500CB	BCT500CB Series control head. 13 control keys (public address included)	344,88
(*) The current BCT500CB series control heads are not compatible with the Bifrost Series. The valid control heads must include in their reference -AUD.			
(**) Bifrost series CAN BUS lightbars of Federal Signal Vama are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.			
MOUNTING OPTIONS			
	8234224 BI-FPB-V	Low permanent mounting bracket	145,00
	BI-FB-V	Metal mounting kits on bars (contact our sales department for available models)	consult
	A-CT23	Roof connector, 23-ways	99,34



QUASAR Series

FEDERAL SIGNAL VAMA offers the **New Integrated Warning system QUASAR**, a revolutionary Solaris technology lighting system completely integrated into the roof and with modular technology, provides high visibility through 360 degrees of emergency vehicle with high light power, increasing visibility and reducing risks. The lights integration into the roof give the vehicle aerodynamics and modernity.

- MODULAR TECHNOLOGY

Modular system perfectly adapted to emergency professionals, where LED lights, sign options, alley and/or front lights, LED light colour, RAL section colour, directional warning lights, rear recording and displaying camera, etc. could be chosen.

- FRONT SECTION R65 T-CATEGORY CLASS 2 APPROVED

Front section according to R65 Regulation T-Category, class 2, in blue and amber colours. Furthermore, front and rear sections are according together with R65 Regulation T-Category, class 2, as well, for same LED light colours.

- BICOLOUR AND TRICOLOUR LIGHT

Bicolour lights for priority lights and tricolour lights for auxiliary lights to meet end user needs.

- ULTRA-LOW PROFILE

Its low profile, lower than 150 mm., reduces aerodynamic resistance allowing a better emergency vehicle grip, a better low height spaces access and a unique design.



- SPLIT ROOF

Independent front and rear sections, so they could be ordered separately, providing high versatility to the system, according customer needs.

- EXCLUSIVE DESIGN

Integrated Quasar System design is for the exclusive use of Federal Signal Vama according to European Union Design Certificate.

- LOW MAINTENANCE COST

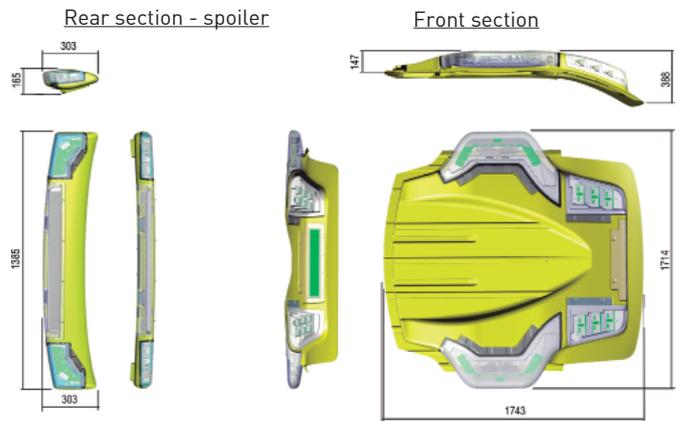
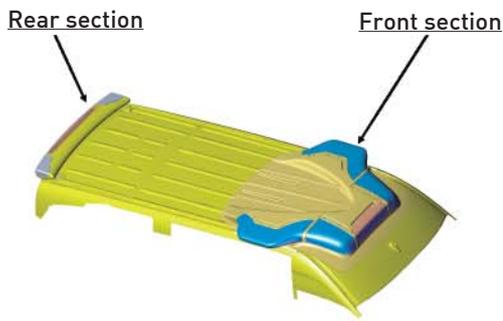
Removable, waterproof optical systems, allowing fast module replacement to any incident that may occur, reducing maintenance cost and increasing vehicle availability.

- VENTILATION SYSTEM

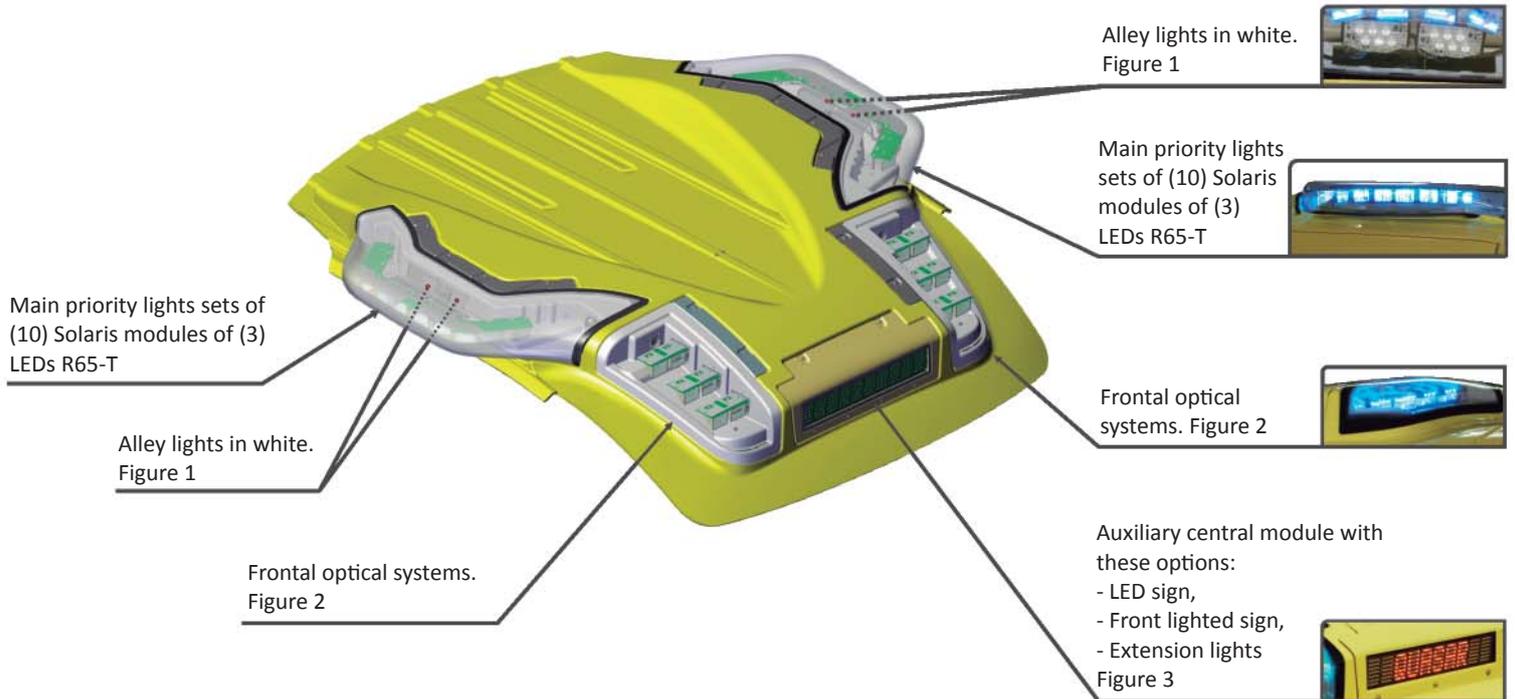
A fan system prevents inside lens condensation, assuring full light output emission.

- LEDS SOLARIS LIGHTS

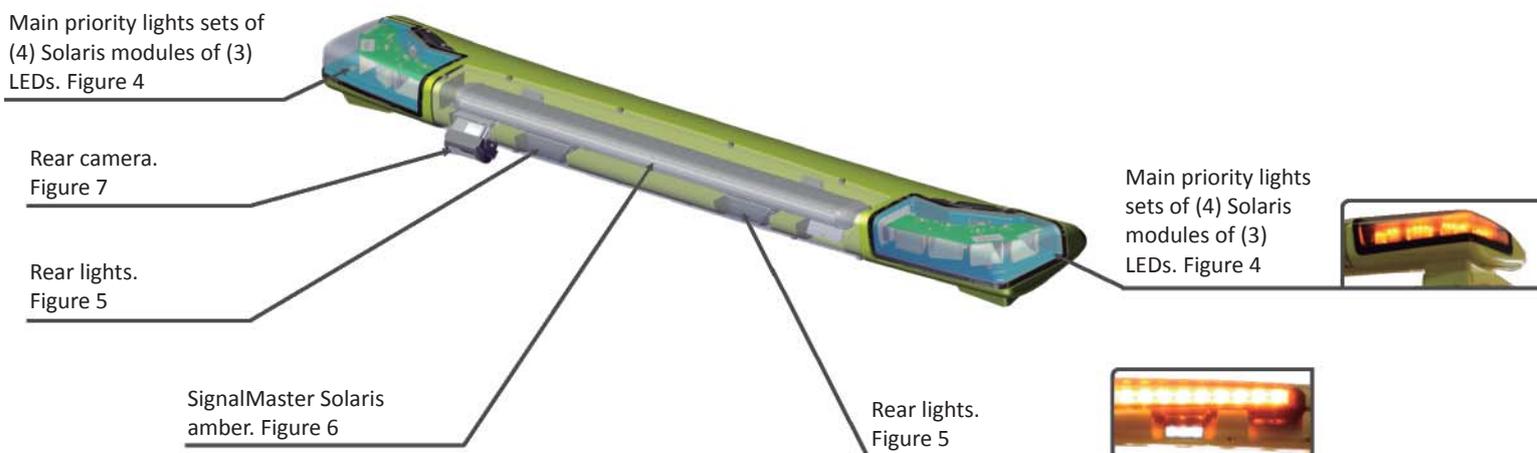
Traditional light systems spread the light in a random direction, LED Solaris technology reflects a strong light beam where it is needed most, on a wide angle, avoiding dark spots.



QUASAR SYSTEM - FRONT SECTION



QUASAR SYSTEM - REAR SECTION - SPOILER



THE FRONT AND REAR SECTIONS CAN BE PURCHASED SEPARATELY.

Available for MERCEDES SPRINTER and VOLKSWAGEN CRAFTER 2015 whose wheelbase is 3,665 or 4,325 mm and it has got high roof. Other vehicles please consult.

MOD.	DESCRIPTION	EURO
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QUASAR BASIC SYSTEM - FRONT SECTION



QS-BASFR	Front section from Quasar emergency warning system, with (2) main priority lights sets of (10) Solaris modules of (3) LEDs for front section. Available in amber, blue or red colours. SINGLE-COLOUR . Amber and blue main priority lights approved according R65 norm T category all around 360° of the vehicle, without adding any additional warning lighth.	7.620,00
	Amber or red priority lights with silver base, and blue priority lights in blue base.	
	Available for MERCEDES SPRINTER and VOLKSWAGEN CRAFTER 2015 whose wheelbase is 3,665 or 4.325 mm and it has got high roof. Other vehicles please consult.	
	(*) Specify RAL colour of the basic system Quasar base when ordering.	

ADDITIONAL LIGHTING OPTIONS

OSL-1C-AD	BICOLOUR priority lights option.	270,00
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Figure 1. Alley lights lower view.

OSFL-2	(4) alley light kit (2 for right side and 2 for left side) for the vehicle. They illuminate the area under main priority lights.	372,00
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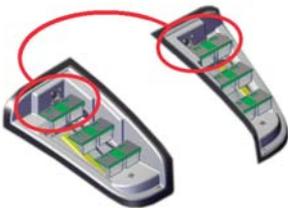


Figure 2. Frontal optical systems.

QSFDI-M	(2) SINGLE-COLOUR* LED lights set with 3 LEDs for frontal optical systems. In amber, blue, red or white colours	228,00
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QSFDI-B	(2) BICOLOUR* LED lights set with 3 LEDs for frontal optical systems. In amber, blue, red and/or white colours	282,00
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QSFD1-T	(2) TRICOLOUR* LED lights set with 3 LEDs for frontal optical systems. In amber, blue, red and/or white colours.	336,00
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(*) Three sets of (2) modules maximum for each frontal optical system.

CENTRAL FRONT SECTION OPTIONS

Select a single option for the central front section.



Figure 3.

OSCL	(1) Programmable LED sign for central front section - LSG700	795,00
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Figure 3.

OSCI	(1) Front lighted sign with text for central front section	236,40
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Figure 3.

OSNL-2M	(2) LED blue, amber, red or white lights, synchronized with main priority lights, independently controlled or in steady burn mode for central front section	378,00
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OSNL-4M	(4) LED blue, amber, red or white lights, synchronized with main priority lights, independently controlled or in steady burn mode for central front section	588,00
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MOD.	DESCRIPTION	EURO
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QUASAR BASIC SYSTEM - REAR SECTION - SPOILER

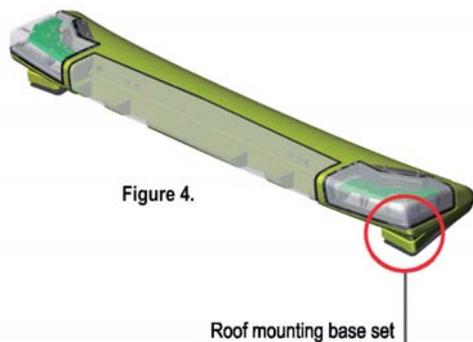


Figure 4.

Roof mounting base set

QS-BASPS	(1) Rear section spoiler from Quasar emergency warning system, with (2) main priority lights sets of (4) Solaris modules of (3) LEDs for rear section. Available in amber, blue or red colours. SINGLE-COLOUR . (See Figure 4).	3.312,22
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Amber and blue main priority lights approved according R65 norm T category together with vehicle front section. Amber or red priority lights with silver base, and blue priority lights in blue base.

Available for MERCEDES SPRINTER and VOLKSWAGEN CRAFTER 2015 whose wheelbase is 3,665 or 4,325 mm and it has got high roof. Other vehicles please consult.

(*) Specify RAL colour of the basic system Quasar base when ordering.

QS-APOYO-PS	(1)Roof mounting base set, please consult available vehicle models.	231,60
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REAR SECTION OPTIONS

QSP-1C-AD	BICOLOUR priority lights option	109,20
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QSNLPS-2M	(2) LED blue, amber, red or white lights, synchronized with main priority lights, independently controlled or in steady burn mode for rear section (See figure 5).	294,00
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QSSML	(1) Signalmaster Solaris low-profile directional warning light, with (4) flash patterns (right, left, centre-out and center-out flashing mode) (See figure 6).	560,00
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Recording and displaying options

	Rear camera displaying images	2.080,65
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QSDXT-RC	(1) Left side rear camera for rear section	488,40
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4520093-02	(1) 10,2" Display and management screen	1.584,00
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4520140	(1) Camera and touchscreen connector	8,25
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Rear camera recording and displaying images

	(1) Atenea FEDVISION basic system. High definition video and audio recording system. It manages and stores video images and audio through user-defined approaches, and it allows a pre-recording mode an remote video streaming visualization.	See Atenea System Price List
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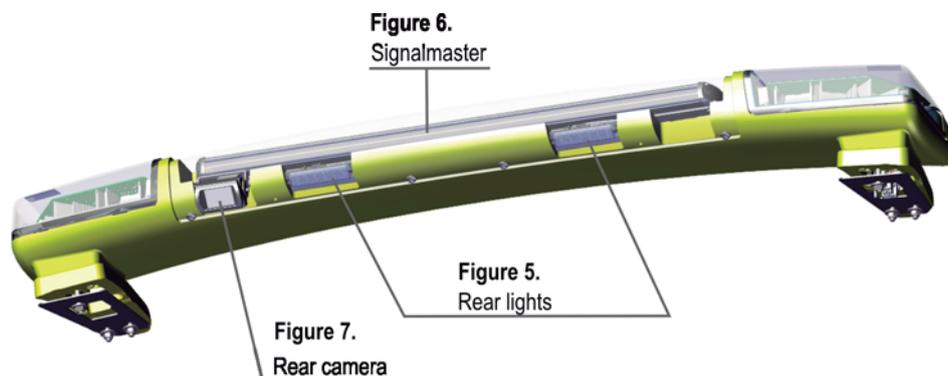


Figure 6.
Signalmaster

Figure 5.
Rear lights

Figure 7.
Rear camera

REF.	MOD.	DESCRIPTION	EURO
ANALOG CONTROL system			
8216112		LCD700 Control head w/ LCD back-lit screen to display messages. (Please specify language when ordering)	177,06
Acoustic options			
2021047	AL-252N	100W Speaker, round horn, neodymium driver, metal L- bracket (1) (Please specify the international tones when ordering)	240,86
2020256	AS-320DIG	100W Siren amplifier, (3) tones, remote control, P.A., (1) light output, (1) auxiliar output, wiring harness, 12V	395,08
CAN BUS Controllers			
BCT3000-14	BCT3000	BCT3000, Control Head for lights, sirens and LED Signs (no P.A.)	392,24
BCT2004-01	BCT2004	BCT2000 Series control head, 4 control keys.	119,38
BCT2006-01	BCT2006	BCT2000 Series control head, 6 control keys.	127,34
BCT2010-01	BCT2010	BCT2000 Series control head, 10 control keys.	142,12
BCT2015-01	BCT2015	BCT2000 Series control head, 15 control keys.	158,60
BCT2021-01	BCT2021	BCT2000 Series control head, 21 control keys.	199,53
8216160	BCT500CB	BCT500CB Series control head, 13 control keys (public address included)	344,88
Converter ANALOG-CAN BUS			
8235978		CANBUS Control box (Activation of functions via direct cable by positive)	186,46
8299753		SOLARIS CANBUS control head connection kit (not necessary when the system does not have a lightbar)	27,22
Acoustic options			
2021047	AL-252N	100W Speaker, round horn, neodymium driver, metal L- bracket (1) (Please specify the international tones when ordering)	240,86
2020269	AS320DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible only with BCT2000 and BCT500CB Series control heads. P.A not included	355,86
8235984		Public address kit with remote control. Volume and microfone functions control (for control head BCT3000) 12V	73,33

Maximum lighting around the perimeter of the vehicle





Option 360° camera
TRAFFIC VIEW



TRAFFIC STORM Series

Configurable lightbars.

Low profile lightbar with ROC Solaris technology and foldable led sign specially designed for applications where the signal through a text message or voice is essential.

Two levels of light allow multiple combinations of lights and colours, thereby optimizing the internal capacity of the lightbar without losing any option for auxiliary signalling.

It is equipped with one or two powerful foldable Led signs for front and/or rear legend.

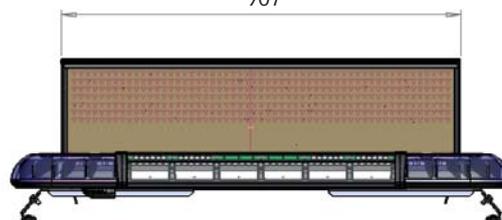
The lightbar being Can Bus controlled, it can activated multiple programmable functions just by pressing a single button on the keypad.

Traffic Storm Series (priority lights in blue or amber) is approved for the European Regulation R65 and is according to European Directive 2004/10/EC on Electromagnetic Compatibility.

Voltage:	12V
Standby consumption:	0,3Amp
Main warning lights, total average consumption:	3,2A in flash, 0,5A in cruise light
Front modules (white light), average consumption:	1A for module
Lateral modules (white light), average consumption:	0,5A for module
Supplementary modules (amber light), average consumption:	1A for module
Lighted sign, average consumption:	0,4A for module
Complete rear and front foldable LED sign. LED Panel: 630 LEDs. SignalMaster: 288 LEDs	3,2A for panel + 1A SignalMaster

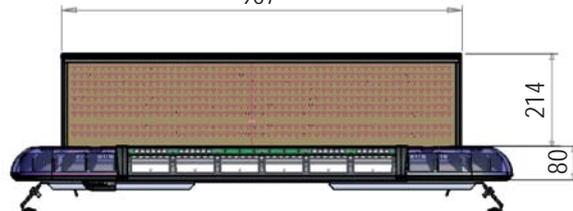
Frontal View

907



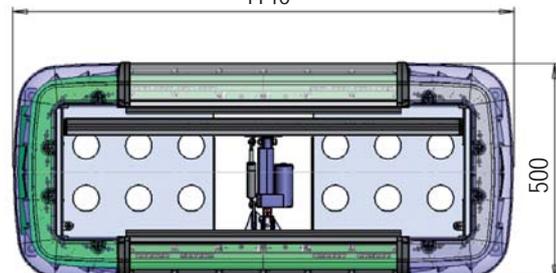
Rear View

907



Upper View

1140



Traffic Storm dimensions (mm)



TRAFFIC STORM Solaris Series

REF.	MOD.	DESCRIPTION	EURO
		Options - Priority lights	
	TF-SL	44" Basic lightbar, (20) Solaris modules of (3) LEDs, blue light or amber, wiring harness, UN R65 approved class 2	1.922,83
	TF-SL13	53" Basic lightbar, (20) Solaris modules of (3) LEDs, blue light or amber, wiring harness, UN R65 approved class 2 (* Mounting kit is not included in price and must be ordered separately)	2.002,00
		Options - Lateral Section - Alley light	
	TF-FL	(4) Solaris modules of (3) LEDs, white light	214,96
		Options - Front & Center Section - Lower Level	
	TF-FF	(2) Solaris modules of (6) LEDs, white light, steady burn and/or flashing.	221,42
	TF-LE	(2) Solaris modules of (6) LEDs, blue light, priority lights extension.	221,42
	TF-LP	(2) Solaris modules of (6) LEDs, red light, flashing	221,42
	TF-CI	(2) Solaris modules of (6) LEDs, white light, lighted sign without text or vinyl* * The text message must be ordered separately.	221,42
		Options - Rear & Center Section - Lower Level	
	TF-FPT	(2) Solaris modules of (6) LEDs, white light, steady burn and/or flashing.	221,42
	TF-LE	(2) Solaris modules of (6) LEDs, blue light, priority lights extension.	221,42
	TF-A/SM	(2) Solaris modules of (6) LEDs, amber light, flashing or SignalMaster (directional lighting system).	221,42
	TF-CI	(2) Solaris modules of (6) LEDs, white light, lighted sign without text or vinyl* * The text message must be ordered separately.	221,42
		Options - Front & Center Section - Upper Level	
	TF-LP-S	(2) LED modules, red light, flashing	151,50
		Options - Rear & Center Section - Upper Level	
	TF-A/SM-S	(2) LED modules, amber light, flashing or SignalMaster (directional lighting system).	151,50
		Options - Traffic View	
	TF-TV	(1) Traffic View 360° camera	4.540,00
4520137		3D Joystick: Traffic View camera control. Multi protocol support. Could be integrated into Atenea System	203,78
4520093-02		10" Monitor for Traffic View camera images display. Could be integrated into Atenea System (* Foldable LED sign incompatible option)	See Atenea System Price List
		Options Foldable LED Sign * Please contact with our sales department for Traffic Storm without foldable led sign availability	
	TF-CLF	(1) LSG900, foldable LED Sign, red light, 200 programmable messages from the user with normal and/or mirror view and scrolling.	2.074,68
	TF-CLP	(1) LSG900, foldable LED Sign, red light, rear signalisation, integrated SignalMaster (directional lighting system), 200 programmable messages from the user with normal view and scrolling.	2.074,68
	TF-CLF/P	(1) Front LED Sign, red light, front and rear signalisation, 200 programmable messages from the user with normal and/or mirror view(front) and scrolling. (* Traffic View camera incompatible option)	3.347,59
		Mount Accessories	
	TF-CT	Roof connector, 19-ways (obligatory)	75,61
8234176	TF-FP	Permanent mounting kit (recommended)	159,14
	TF-FB	Metal mounting kits on bars	consult
4004536		Cover for 1100mm. (44")	26,90
		Control head	
	BCT3000	Control head for Traffic Storm series ¹ 10 buttons for emergency and auxiliary systems. Delayed public address. Voice player/recorder (1 message) ² TCAN BUS technology with LCD screen. Voice and text messages can be previewed Volume control for public address and voice player. SignalMaster control. USB connection.	392,24
		¹ Contact our sales department for available models. ² BCT3000 enables to pre-programm different voice messages. For further information, contact our sales department.	
		AS320 DIG CAN BUS siren amplifier	
2020268	AS320DIG 12V	100W siren amplifierfor BCT3000. Features: Horn-ring connection. Radio repeat. Relay output (10A) for auxiliary lights synchronized with priority lights. Relay output (1A) for tachograph. Please contact your Sales Dept. for availability and models. Only can be installed with BCT3000 control head.	355,86
2020270	AS320DIG 24V	100W siren amplifierfor BCT3000. Features: Horn-ring connection. Radio repeat. Relay output (10A) for auxiliary lights synchronized with priority lights. Relay output (1A) for tachograph. Please contact your Sales Dept. for availability and models. Only can be installed with BCT3000 control head.	355,86
		Public address	
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT3000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT3000) 24V	73,33
		Programming Accessories	
2025473	S2ME	SmartSign 2 Message Editor, for editing and downloading messages from PC. Only available for LSG900 programmable LED sign in Traffic Storm lightbars series. (* All Federal Signal Vama CAN BUS lightbars are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.	104,88



VALOR Series



Valor lightbar is the first and only non-linear, low profile LED lightbar. A lightbar that increases visibility, optimizes performance, and reduces risk to any emergency situation. SPECTRALUX™ provides a fully programmable range of color combinations for optimum warning capability to flood light performance.

- SAFETY AT THE CRITICAL ANGLES

Valor V-shape was engineered to outperform at 45-degree and 90-degree angles, critical for intersection clearing.

- LEDs SOLARIS LIGHTS

Solaris LED reflector design to significantly maximize the LED light source for full light coverage.

- SPECTRALUX™ MULTICOLOR LED TECHNOLOGY

Provides the ability for a LED light head to change color. LEDs can change between red, blue, amber or white.

- ROC TECHNOLOGY

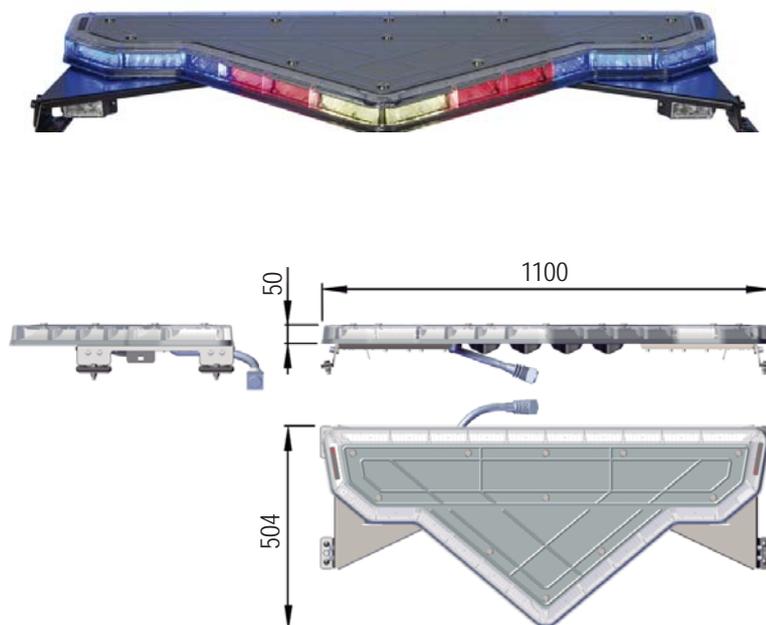
Lineal circuit board-to-board connection which reduce the number of electrical connections in a lightbar.

- UNIQUE DESIGN

Valor lightbar design is FEDERAL SIGNAL use exclusively due to European Union Community Design registration 001925753-0001.

- TWO LEVEL LIGHTS

New mounting brackets system allows to install white TAKE DOWNS and ALLEY lights in a second level that do not interfere with the main lights.



Valor lightbar dimensions in mm.

Voltage:	11,5Vdc to 14,5Vdc - Typical: 13,8Vdc
Temperature of use:	-40°C to 65°C
Current draw:	(at 13,8Vdc) Standby mode: 250mA (no lights connected) Steady mode: add 1000mA by module R65 mod: add 300mA by module = 3A, the complete R65
LED colour:	blue, amber, red and white
Technology:	SOLARIS SPECTRALUX
Lens colour:	Clear
Dimensions:	VALR44 - 1110 mm x 50 mm x 504 mm
Weight (without mounting brackets):	11,6 kgs.
Weight (with mounting brackets):	16 kgs.



REF.	MOD.	DESCRIPTION	EURO
Preselected models:			
VALR44-2674993E		<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 24 Blue LEDs Solaris modules * Secondary lights: <ul style="list-style-type: none"> - 2 white TAKE DOWN LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules - 8 amber rear LEDs Solaris modules (Signalmaster function) * 19 ways roof connector 	<p>3.317,40</p> <p>Color configuration by module: * 12 blue modules * 4 blue and white modules * 8 blue and amber modules</p>
VALR44-2675002E		<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 10 Blue LEDs Solaris modules (left) and 10 Red LEDs Solaris modules (right) * Secondary lights: <ul style="list-style-type: none"> - 2 white TAKE DOWN LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules * 19 ways roof connector 	<p>3.317,05</p> <p>Color configuration by module: * 10 blue modules * 10 red modules * 2 white modules * 1 blue and white module * 1 red and white module</p>
VALR44-2633966E		<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 24 Blue LEDs Solaris modules * Secondary lights: <ul style="list-style-type: none"> - 6 white TAKE DOWN LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules - 4 red front LEDs Solaris modules (stop function) - 6 amber LEDs Solaris modules in the rear (Signalmaster function) * Cruise light * 19ways roof connector 	<p>3.700,94</p> <p>Color configuration by module: * 10 blue modules * 4 blue and white modules * 6 blue and amber modules * 4 blue, red and white modules</p>
VALR44-PMM		<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 12 Blue LEDs Solaris modules * Secondary lights: <ul style="list-style-type: none"> - 2 white TAKE DOWNS LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules - 4 red front LEDs Solaris modules (stop function) - 6 amber rear LEDs Solaris modules (Signalmaster function) * Cruise light * 19 ways roof connector * Prewired for auxiliary lights on mounting kit (auxiliary lights sold separately) 	<p>3.620,61</p> <p>Color configuration by module: * 10 blue modules * 4 red modules * 2 white modules * 6 amber modules * 2 blue and white modules</p>
VALR44-PL		<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 12 Blue LEDs Solaris modules * Secondary lights: <ul style="list-style-type: none"> - 2 white TAKE DOWNS LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules - 4 red front LEDs Solaris modules (stop function) - 6 amber rear LEDs Solaris modules (Signalmaster function) * Cruise light * 19 ways roof connector 	<p>3.307,96</p> <p>Color configuration by module: * 10 blue modules * 4 red modules * 2 white modules * 6 amber modules * 2 blue and white modules</p>
VALR44-0001E	 <small>* Controlled with the control head BCT500CB-GR</small>	<p><u>Valor Series Lightbar 44", composed by:</u></p> <ul style="list-style-type: none"> * Main lights: 24 Blue LEDs Solaris modules * Secondary lights: <ul style="list-style-type: none"> - 2 white TAKE DOWN LEDs Solaris modules - 2 white ALLEY LIGHTS LEDs Solaris modules - 2 red rear LEDs Solaris modules * Cruise lights * 19 ways roof connector 	<p>3.398,05</p> <p>Color configuration by module: * 24 blue modules * 4 blue/white modules * 2 blue/red modules</p>
Auxiliary lights for mounting kits			
IMPAXX-FF-WH	(2) Impaxx, Solaris LEDs lights in white, clear dome, without flasher, multitension 10-30V, to be installed in mounting brackets as Take Down light	250,00	
IMPAXX-FL-WH	(2) Impaxx, Solaris LEDs lights in white, clear dome, without flasher, multitension 10-30V, to be installed in mounting brackets as Alley light	250,00	
Converter ANALOG-CANBUS			
8235978-06	CANBUS Control box for Valor	186,46	
8235631	Mini connection box MF8-TF8	23,65	
Control heads			
BCT2015-12	BCT2015	15-BUTTON CONTROL BOX, for Valor Series	158,60
BCT2021-12	BCT2021	21-BUTTON CONTROL BOX, for Valor Series	199,53
8216160GR	BCT500CB-GR	Control box for VALR44-0001E Valor Series lightbar	344,88
100W Siren amplifier			
2020269	AS320DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible only with BCT2000 and BCT500CB Series control heads. P.A not included	355,86
2020271	AS320-24DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 24V. Compatible only with BCT2000 and BCT500CB Series control heads. P.A not included	360,40
Public address			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 24V	73,33
Mounting Options			
8234204	VALR-FT	Hook-on mounting kit (hook-on not included)	194,00
8234205	VALR-FP	Permanent mounting kit	194,00
8234221	VALR-BJ	Hook-on mounting kit low profile (hook-on not included)	407,40
	A-CT19	19 ways roof connector for Valor Series	75,61

(* All Federal Signal Vama CAN BUS lightbars are compatible with FEDEMERGENCY Sistem from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.



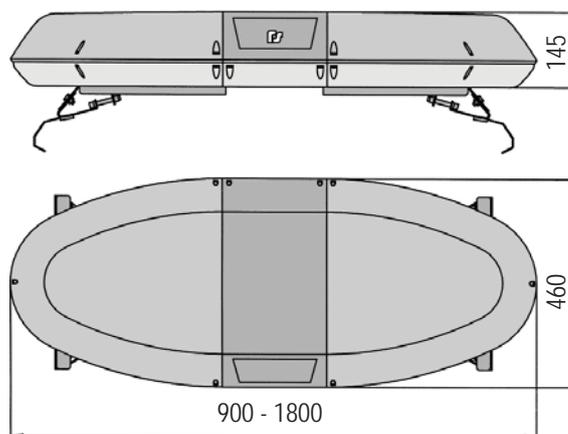
VISTA Series

Lightbars with a modern design and two light levels (upper and lower level) and an extreme broad range of set-up options for visual and acoustic emergency signalling.

Priority lights are available with three different technologies for various applications:

The **Vista Solaris** series stands out for its Solaris Led priority lights, whose light emission is made by module assembly composed of 3 leds of 3 watts and a semiparabolic reflector of metallized polycarbonate, all arranged around the perimeter of a horizontal plate of ROC technology print circuit, which eliminates the conventional wiring inside the lightbar.

It also has a wide range of lighting and acoustic options, like Takedown and Alley lights, LED steady burn and/or flashing modules, auxiliary lights, SmartSign programmable LED signs, LED SignalMasters, Integrated control systems, siren amplifiers, and 100W loudspeakers.



Vista Series dimensions (mm).

Voltage:	12 or 24 V
Dimensions:	900 - 1800 x 460 x 145 mm
Available lengths:	36" (900 mm) - without speaker 44" (1100 mm), 53" (1350 mm) 62" (1600 mm), 71" (1800 mm)
LED colours:	blue, amber, red and white



REF.	MOD.	DESCRIPTION	EURO
Specify All Options System			
	X01-X03	36" (900 mm) Lightbar, all-light, wiring harness	577,43
	X11-X13	44" (1100 mm) Lightbar, all-light, wiring harness	678,51
	X21-X23	53" (1350 mm) Lightbar, all-light, wiring harness	793,05
	X31-X33	62" (1600 mm) Lightbar, all-light, wiring harness	894,30
	X41-X43	71" (1800 mm) Lightbar, all-light, wiring harness	1.067,19
	X12-X14	44" (1100 mm) Lightbar, speaker, wiring harness	980,35
	X22-X24	53" (1350 mm) Lightbar, speaker, wiring harness	1.117,31
	X32-X34	62" (1600 mm) Lightbar, speaker, wiring harness	1.212,56
	X42-X44	71" (1800 mm) Lightbar, speaker, wiring harness	1.390,78

(*) Mounting kit included in price. Hook-on brackets purchased separately

Options - Priority lights - Upper Level

Solaris LEDs

	X-SL	(26) modules of (3) high-intensity LEDs with parabolic reflector, blue (UN 65 approved), amber or red light	1.397,24
	X-SL2	2 CAN BUS LED Solaris crowns with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light	1.139,24

Options - Center Section - Upper Level

	X-CIO/1	(1) Lighted opal sign, on central module, 1100mm lightbars	110,26
	X-CIO/2	(2) Lighted opal sign, on central modules, 1300mm lightbars	231,64
	X-CIOL/1	(1) LEDs lighted opal sign, on central module, 1100mm lightbars	127,11
	X-CIOL/2	(2) LEDs lighted opal sign, on central modules, 1300mm lightbars	254,22
	X-AD	(1) Adhesive message for lighted sign (front or rear)	17,65
	X-VB	(1) Installation of VisiBeam in a Vista Series lightbar. (Light not included)	186,40

Options - Center Section - Upper Level

	AS320 DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible only with BCT2000 and BCT500-CB Series control heads	355,86
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Options - Secondary Lights - Lower Level (specify colour)

	X-SLE	(1) modules of (3) high-intensity LEDs with parabolic reflector, blue, amber, red and white light	53,74
	X-FPL	(2) Work lights, w/ lens	89,19

(*) The function for each Solaris module must be specified when the lightbar and control head are ordered.

(**) Please contact your Sales Dept. for availability of configurations and versions.

Public address

8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 24V	73,33

CAN BUS Control Head

BCT2004-01	BCT2004	BCT2000 Series control head. 4 control keys.	119,38
BCT2006-XX	BCT2006	BCT2000 Series control head. 6 control keys.	127,34
BCT2010-XX	BCT2010	BCT2000 Series control head. 10 control keys.	142,12
BCT2015-XX	BCT2015	BCT2000 Series control head. 15 control keys.	158,60
BCT2021-XX	BCT2021	BCT2000 Series control head. 21 control keys.	199,53
8216160XX	BCT500CB	BCT500CB Series control head. 13 control keys (public address included)	344,88

(*) Please contact your Sales Dept. for availability.

Converter CAN BUS - ANALOG

2006036		Inputs box to convert a CAN BUS lightbar in an analog system (the functions are activated through positive cable)	80,67
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Mount Accessories

8234144	X-FP	Permanent mounting kit	199,18
8234137		Hook-on mounting bracket (hook-on not included)	169,25
	X-FB	Metal mounting kits on bars (contact our sales department for available models)	consult
	X/CT-23	Roof connector, 23- ways	99,34
4004536		Cover for 1100mm. (44")	26,90

(*) All Federal Signal Vama CAN BUS lightbars are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.



ARJENT Series



Federal Signal Vama presents **ARJENT Solaris Series**, a low profile LED aerodynamic design lightbar, equipped with the most advanced LED technology, the Solaris technology, inspired by the sun's rays providing exceptional wide angle of coverage.

- 360° LIGHT BEAM DISTRIBUTION

Its advanced optical design and the elliptical shape of Arjent provide 360° coverage and significantly greater off-axis warning than traditional linear lightbars eliminating dark spots.

- SOLARIS TECHNOLOGY

Optical System with parabolic reflector composed by 3 Last generation LEDs.

- ROC TECHNOLOGY (Reliable Onboard Circuitry)

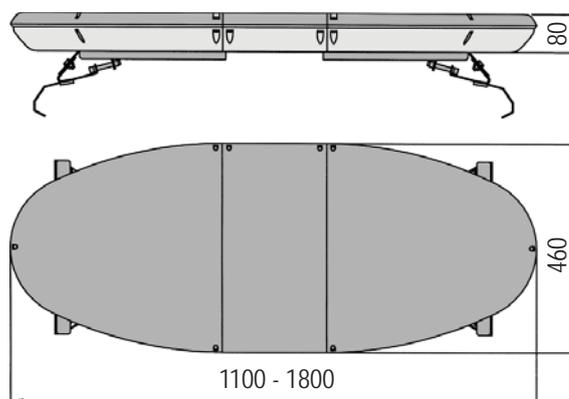
ROC technology eliminates 85% of potential failure points in the lightbar, reducing repair costs and increasing the hours your emergency vehicles stay on the road. ROC incorporates a printed circuit board in one assembly to reduce the amount of electrical connections found in a typical lightbar.

- CANBUS

Communication systems between lightbar, siren (AS-320) and the controller head (BCT500 or BCT2000). This system minimizes wiring installation and allows customizing the lightbar without removing it of the vehicle.

- BICOLOUR OPTION

Latest bicolour LEDs generation available upon request.



Arjent Series dimensions (mm).

Voltage:	10-30V
Operating temperature:	-20 to +50° C
Current draw (average) per module in flash mode:	0.4 Amp (12V) / 0.25 Amp (24V)
Current draw (average) per module in cruise light mode:	0.05 Amp (12V) / 0.03 Amp (24V)
Current draw per module in steady burn:	0.4A (12V) / 0.25A (24V)
Colours of LEDs:	Amber, Blue and Red
Colours of lenses:	Base: Clear / Cover: Amber, Blue and Red
Dimensions:	1100 - 1800 x 460 x 80 mm
Weight:	According to model



REF.	MOD.	DESCRIPTION	EURO
Specify All Options System			
AJ11-AJ13		44" (1100 mm) Lightbar, all-light, wiring harness	436,42
AJ21-AJ23		53" (1350 mm) Lightbar, all-light, wiring harness	540,29
AJ31-AJ33		62" (1600 mm) Lightbar, all-light, wiring harness	630,52
AJ41-AJ43		71" (1800 mm) Lightbar, all-light, wiring harness	735,74
(*) Mounting kit is not included in price and must be ordered separately			
Priority Lights Solaris LEDs			
AJ-SL		(16) modules of (3) high-intensity LEDs with parabolic reflector, blue (UN 65 approved) amber (UN R65 approved) or red light.	859,84
Options - Secondary Lights - Lower Level (specify colour)			
AJ-SLE		(1) modules of (3) high-intensity LEDs with parabolic reflector, blue, ambar, red and white light	53,74
(*) The function for each Solaris module must be especified when the lightbar and control head are ordered.			
(**) Please contact your Sales Dept. for availability of configurations and versions.			
Acoustic options - Center Section - Upper Level			
2020269	AS320-12DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible only with BCT2000 and BCT500CB Series control heads. Public address not included	355,86
2020271	AS320-24DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 24V. Compatible only with BCT2000 and BCT500CB Series control heads. Public address not included	360,40
Public address			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 24V	73,33
CAN BUS Control Head			
BCT2004-01	BCT2004	BCT2000 Series control head. 4 control keys.	119,38
BCT2006-XX	BCT2006	BCT2000 Series control head. 6 control keys.	127,34
BCT2010-XX	BCT2010	BCT2000 Series control head. 10 control keys.	142,12
BCT2015-XX	BCT2015	BCT2000 Series control head. 15 control keys.	158,60
BCT2021-XX	BCT2021	BCT2000 Series control head. 21 control keys.	199,53
8216160XX	BCT500CB	BCT500 Series control head. 13 control keys (public address included)	344,88
(*) Please contact your Sales Dept. for availability.			
Mount Accessories			
	AJ-FB	Integrated search light for Arjent Series lightbar 12V	565,00
	AJ-FB-24	Integrated search light for Arjent Series lightbar 24V	695,00
8234144	AJ-FP	Permanent mounting kit	199,18
8234137	AJ-FT	Hook-on mounting bracket (hook-on not included)	169,25
	AJ-FB	Metal mounting kits on bars (contact our sales department for available models)	consult
	A-CT19	Roof connector, 19-ways	75,61
4004536		Cover for 1100mm. (44")	26,90
Converter CAN BUS - ANALOG			
2006036		Inputs box to convert a CAN BUS lightbar in an analog system (the functions are activated through positive cable)	80,67
(*) All Federal Signal Vama CAN BUS lightbars are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.			



LEGEND Series

The **Legend** model stands out for a popular, low-profile lightbar. This lightbar system is made of 3rd generation Solaris LEDs and integrates the ROC (Reliable Onboard Circuitry) technology, which eliminates approximately 85% of the potential failure points in a typical lightbar. The optimized Solaris LED lights maximize the warning signals at 360°.

All Legend lightbars contain an advanced micro-processor which provides three modes of operation, a library of flash patterns, adjustable Alley and Takedown lights, front/rear cut-off, dimming, and intersection warning.

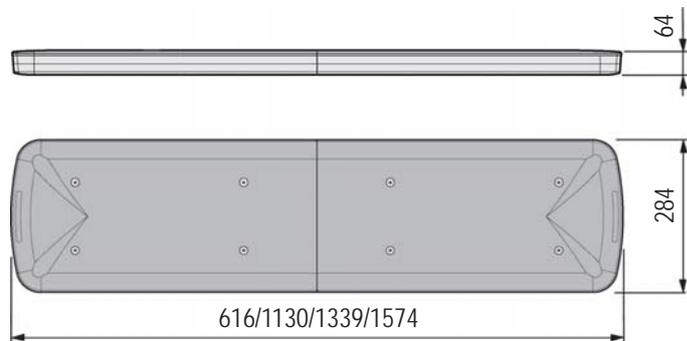
Legend can be easy reconfigured in minutes, right on the vehicle, without removing and rewiring individual light modules. ROC boards are also individually labelled to make the reconfiguration easy.

Legend can be configured with secondary warning lights: Takedown and Alley lights, and Solaris SignalMasters*.

Bicolour option, latest bicolour LEDs generation available upon request.



Legend Series dimensions (mm).



* SignalMaster 8-modules on 1100 lightbar.
SignalMaster 11-modules on 1340 lightbar.

Voltage:	10-30V
Dimensions:	24", 45", 53", 61", 70" (616, 1130, 1339, 1547, 1753 x 284 x 64 mm)
Solaris LEDs colours:	blue, amber, red, green, white



REF.	MOD.	DESCRIPTION	EURO
Specify All Options System			
	LGD-B45"	45" (1130 mm) Legend Lightbar, wiring harness	458,37
	LGD-B53"	53" (1339 mm) Legend Lightbar, wiring harness	536,74
	LGD-B61"	61" (1547 mm) Legend Lightbar, wiring harness	649,48
	LGD-B70"	70" (1753 mm) Legend Lightbar, wiring harness	791,94
(*) Mounting kit is not included in price and must be ordered separately			
Priority Lights			
	LGD-SL	(16) modules of (3) high-intensity LEDs with parabolic reflector, blue (UN 65 approved) amber (UN 65 Approved) or red light (UN 65 approved)	859,84
	LGD-SL BI	(16) modules of (3) high-intensity LEDs with parabolic reflector, blue (UN 65 approved) amber (UN 65 Approved) or red light (UN 65 approved) BICOLOUR	1.187,84
Lighting Options			
	LGD-SL	(1) modules of (3) high-intensity LEDs with parabolic reflector, blue, amber, red and white light*	53,74
* The function for each Solaris module in the lower level must be specified when the lightbar is ordered. (**) Please contact your Sales Dept. for availability of configurations and versions.			
100W Siren amplifier			
2020269	AS320DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible with with BCT2000 and BCT500CB control heads series. Public address not included	355,86
2020271	AS320-24DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 24V. Compatible with with BCT2000 and BCT500CB control heads series. Public address not included	360,40
Public address			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 24V	73,33
Control Heads			
BCT2004-01	BCT2004	BCT2000 Sereis control head. 4 control keys.	119,38
BCT2006-XX	BCT2006	BCT2000 Series control head. 6 control keys	127,34
BCT2010-XX	BCT2010	BCT2000 Series control head. 10 control keys	142,12
BCT2015-XX	BCT2015	BCT2000 Series control head. 15 control keys	158,60
BCT2021-XX	BCT2021	BCT2000 Series control head. 21 control keys	199,53
8216160XX	BCT500CB	BCT500 Series control head. 13 control keys (public address included)	344,88
(*) Please contact your Sales Dept. for availability.			
Mounting options			
	LGD-FB	Integrated search light for Legend Series lightbar 12V*	565,00
	LGD-FB-24	Integrated search light for Legend Series lightbar 24V*	695,00
8234174	LGD/FP	Permanent mounting kit	101,86
	LGD-FB	Metal mounting kits on bars (contact our sales department for available models)	consult
	A-CT19	Roof connector, 19-ways	75,61
4004536		Cover for 1100mm. (44")	26,90
(*) The inclusion of integrated search light al Legend lightbar doesn't allow to install auxiliary lights below this integrated search light.			
Converter CAN BUS - ANALOG			
2006036		Inputs box to convert a CAN BUS lightbar in an analog system (the functions are activated through positive cable)	80,67
(*) All Federal Signal Vama CAN BUS lightbars are compatible with FEDEMERGENCY System from Atenea Integrated Vehicle Solutions. For more information see ATENEA Catalogue.			



PHOENIX Series

Revolutionary compact and versatile lightbar, designed for high-priority, complementary and acoustic signalling. The smoothed design of the lateral lenses provides better aerodynamics and watertightness.

- **Phoenix ROC Solaris** series is formed by a high-efficiency PC board with integrated microprocessor, 15 high-luminosity LED diodes of the latest generation, placed on the multivoltage (10-30V) PC board and a parabolic reflector that maximises the luminosity of the LEDs with bicolour LED options.

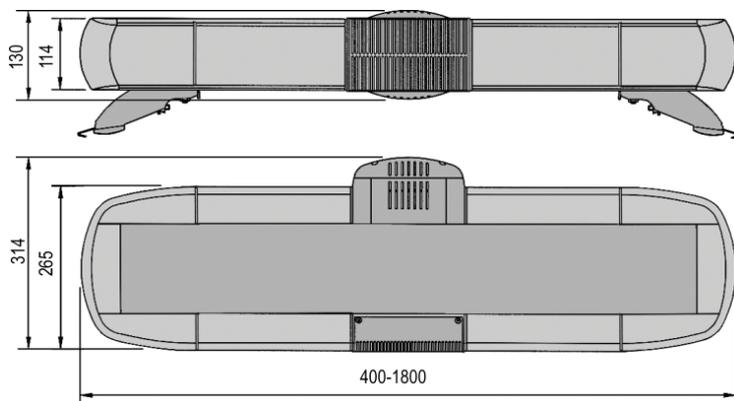
- **Phoenix Strobe** series has high-power strobe lights and power supply integrated in the lightbar. Available with directional and omnidirectional strobes.

- **Phoenix Halogen** series is made of high-luminosity and efficiency independent or synchronised rotating halogen lights.

These three types provide an extremely wide range of set-up options to meet the most demanding needs and requirements.

Lighting options: Takedown and Alley lights, Solaris LED modules, additional halogen or strobe units, SmartSign programmable LED sign, and SignalMasters with Solaris LED or halogen modules.

Acoustic options: 30 W compact sirens, 100W speakers, siren amplifiers and Integrated Control Systems.



Phoenix Series dimensions (mm).

Voltage	12 or 24 V
Dimensions:	400 - 1800 x 265 x 114 mm (without speaker) 400 - 1800 x 314 x 130 mm (with speaker)
Available lengths:	400 mm Mini lightbar 800, 900, 1000, ... - 1800 mm"
Solaris LED colours:	blue, amber, red, white
Speaker colours:	white or black



REF.	MOD.	DESCRIPTION	EURO
ROC Solaris Series			
Mini lightbars - Standard lengths: 400mm - 700mm			
MPXS-2S1N		Basic Minilightbar, standard length, (2) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	762,94
MPXS-2S2N		Basic Minilightbar, standard length, (4) rings of (15) high-intensity LEDs in (2) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	1.117,80
MPXS-2S1N BI		Basic Minilightbar, standard length, (2) BICOLOUR rings of (15) high-intensity LEDs in (1) level, blue (UN 65 approved), amber (UN 65 approved) and/or red (UN 65 approved) light, bitension, wiring harness.	929,22
(*) Mounting kit is not included in price and must be ordered separately			
Specify All Options System - Standard lengths: 701mm - 1200mm			
PXS-2S1N		Basic lightbar, standard length, (2) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	885,07
PXS-2S2N		Basic lightbar, standard length, (2) rings of (15) high-intensity LEDs in (2) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	1.248,80
PXS-4S1N		Basic lightbar, standard length, (4) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	1.248,80
PXS-4S2N		Basic lightbar, standard length, (4) rings of (15) high-intensity LEDs in (2) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red (UN 65 approved) light, bitension, wiring harness	1.976,26
PXS-2S1N		Basic lightbar, standard length, (2) BICOLOUR rings of (15) high-intensity LEDs in (1) level, blue (UN 65 approved), amber (UN 65 approved) and/or red (UN 65 approved) light, bitension, wiring harness	1.055,70
(*) Mounting kit is not included in price and must be ordered separately			
PHOENIX Strobe Series			
Specify All Options System - Standard lengths: 500mm - 1200mm			
PXE-CHL		Basic lightbar, standard length, (2) 360° Strobe heads, w/ basic power supply, wiring harness. Economic version. UN R65 approved	806,27
PXE-HL		Basic lightbar, standard length, (2) 360° Strobe heads, w/ power supply, wiring harness. UN R65 approved	885,07
PXE-HL4		Basic lightbar, standard length, (4) Directional strobe heads, w/ power supply, wiring harness. UN R65 approved	959,74
(*) Mounting kit is not included in price and must be ordered separately			
Lighting Options			
PXE-R2		(2) Extra belt-driven rotators, H1 lamp 12V	143,05
PXE-R2-24		(2) Extra belt-driven rotators, H1 lamp 24V	177,02
PXE-CD81		(2) Directional strobe heads, w/ power supply	576,10
PXE-CD82		(2) Directional strobe heads, w/o power supply	167,89
PXE-FA702-2ES		(2) Directional strobe heads, with FA702 power supply	429,50
PHOENIX Halogen Series			
Specify All Options System - Standard lengths: 500mm - 1200mm			
PXH-Mini		400mm Lightbar, (1) Belt-driven rotators, wiring harness. UN R65 approved 12V	324,07
PXH-Mini-24		400mm Lightbar, (1) Belt-driven rotators, wiring harness. UN R65 approved 24V	357,13
PXH-Mini-2		400mm Lightbar, (2) Belt-driven rotators, wiring harness. UN R65 approved 12V	424,64
PXH-Mini-24		400mm Lightbar, (2) Belt-driven rotators, wiring harness. UN R65 approved 24V	441,50
PXH2		Basic lightbar, standard length, (2) Belt-driven rotators, mirrors, (1) cruise light, wiring harness. UN R65 approved 12V	552,87
PXH2-24		Basic lightbar, standard length, (2) Belt-driven rotators, mirrors, (1) cruise light, wiring harness. UN R65 approved 24V	586,53
PXH4-S		Basic lightbar, standard length, (4) Synchronized belt-driven rotators, (1) cruise light, wiring harness. UN R65 approved 12V	739,43
PXH4-S-24		Basic lightbar, standard length, (4) Synchronized belt-driven rotators, (1) cruise light, wiring harness. UN R65 approved 24V	773,15
(*) Mounting kit is not included in price and must be ordered separately			
Lighting Options			
PXH-R2		(2) Extra belt-driven rotators, H1 lamp	143,05
PXE-R2-24		(2) Extra belt-driven rotators, H1 lamp 24V	177,02
PXH-CD81		(2) Directional strobe heads, w/ power supply	576,10
PXE-CD82		(2) Directional strobe heads, w/o power supply	167,89
PXE-FA702-2ES		(2) Directional strobe heads, with FA702 power supply	429,50

REF.	MOD.	DESCRIPTION	EURO
Options for PHOENIX Solaris, Strobe and Halogen Series			
Supplement for lengths			
PX-SUPL/P1		Supplement for lengths between 1300 and 1600 mm	96,01
PX-SUPL/P2		Supplement for special lengths (longer than 1600 mm)	185,53
PX-SUP-SEP		Supplement separators various colors (1 per color)	8,52
Lighting Options			
PX-FF		(2) Front or rear lights, H1 lamp	81,90
PX-LP/FF		(2) LEDs modules (red light) and takedown light (H3 lamp)	378,92
PX-FL		(2) Fixed alley lights, H1 lamp	81,90
PX-FPI		(2) Front or rear flashing lights, H1 lamp	134,60
PX-BTT/LED		(2) Brake/Tail/Turn lights LED	240,26
PX-LF SLR		(2) modules of (3) high-intensity LEDs with parabolic reflector, steady burn mode, blue, amber, red or white lights	152,68
PX-LI SLR		(2) modules of (3) high-intensity LEDs with parabolic reflector, flashing mode, blue, amber, red or white lights	198,13
PX-VB		(1) Visibeam installed upon a Phoenix Series lightbar. Installation included	121,80
Acoustic Options			
PX-AL/100N		(1) 100W Speaker, installed	465,72
PX-SC35		(1) Integrated 35W Compact Siren with 16 available tones	428,64
PX-SC35-FG		(1) Integrated 35W Compact Siren with special tones for Germany (approved) and France.	455,61
PX-AS250		(1) 100W Siren amplifier (AS250), 3 tones, w/o P.A., splash-proof, installed in lightbar. Speaker not included	350,30
Signs Options			
PX-CI1		(1) Front or rear lighted sign, optional message	159,57
PX-CI2		(1) Front and rear lighted sign, optional message	212,99
PX-AD		(2) Adhesive messages for lighted sign	71,92
PX-CIO		(1) Front and rear lighted opal sign, optional message	166,88
PX-CL71		(1) LED Sign, (1) or (2) fixed messages	474,79
PX-CL72		(1) LED Sign, (3) or (4) fixed messages	580,03
PC-CIL1-12		(1) Front or rear LEDs lighted sign, optional message, 12V	189,40
PC-CIL1-24		(1) Front or rear LEDs lighted sign, optional message, 24V	207,84
PX-CIL2-12		(1) Front and rear LEDs lighted sign, optional message, 12V	245,39
PX-CIL2-24		(1) Front and rear LEDs lighted sign, optional message, 24V	264,26
PX-CIOL1-12		(1) Front and rear LEDs lighted opal sign, optional message, 12V	202,73
PX-CIOL1-24		(1) Front and rear LEDs lighted opal sign, optional message, 24V	220,40
PX-LSG700		SmartSign LED sign, 200 programmable messages, 575x195x185mm (LCD700 control head and SmartSign Message Editor not included in price)	879,09
SignalMaster			
PX-SL6 SLR		SignalMaster Solaris, directional lighting system, (6) modules of (3) high-intensity LEDs with parabolic reflector, w/o controller, specify colour red, amber or blue	389,27
SLR-A		SignalMaster Solaris, directional lighting system, (8) modules of (3) high-intensity LEDs with parabolic reflector, w/o controller, specify colour red, amber or blue	527,10
PX-SL6KS SLR		SignalMaster Solaris, directional lighting system, (6) modules of (3) high-intensity LEDs with parabolic reflector, with controller, specify colour red, amber or blue	576,32
PX-SL8KS SLR		SignalMaster Solaris, directional lighting system, (8) modules of (3) high-intensity LEDs with parabolic reflector, with controller, specify colour red, amber or blue (* Control purchased separately. See Signalmaster controllers or Integrated Control Systems	711,90
Mount Accesories			
8234087	PX-FP/PA	Permanent mounting bracket, high	57,40
8234105	PX-FP/PB	Permanent mounting bracket, low	56,25
8234104	PX-FT	Hook-on mounting kit (hook-on not included)	66,27
8234150	PX-FMG	Magnetic mounting kit MINIPhoenix	251,09
	PX-CT23	Roof connector, 23-ways	99,34
4004536		Cover for 1100mm. (44")	26,90





4000/3000/2000 Series

The 4000/3000/2000 Series have a compact, reliable design that combines the features of a high-quality lightbar with low-cost requirements.

- The **4000 Solaris** series stands out for its 24 latest-generation Solaris LED priority lights with advanced optical design, high intensity and reduced consumption.

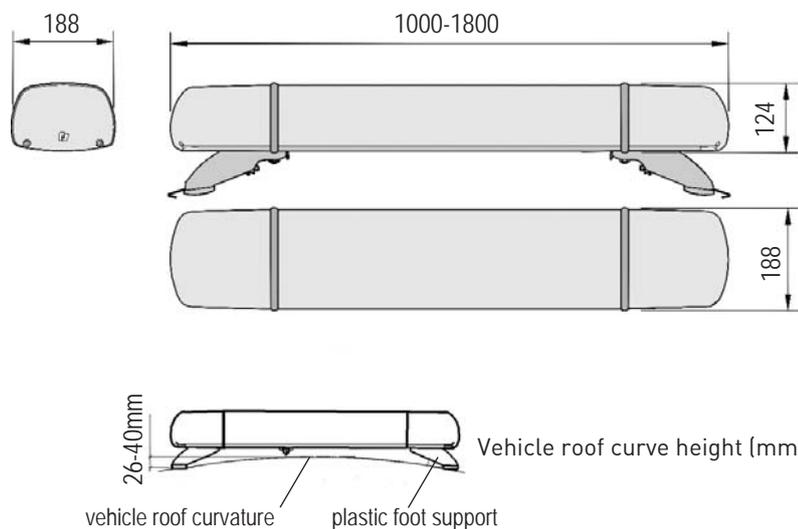
- The **3000 Strobe** series has two, four or six high-power omnidirectional strobe lights. The power supply is integrated in the lightbar.

- The **2000 Halogen** series is made of high-luminosity single or synchronised rotating halogen priority lights.

The 4000/3000/2000 series come with secondary lighting options including Takedown and Alley lights, Solaris LED modules, additional halogen or strobe units, illuminated signs, SignalMasters, and Brake, turn, tail lights.



4000 Solaris, 3000 and 2000 Series dimensions (mm).



Voltage:	12 or 24 V
Dimensions:	600 - 1800 x 188 x 124 mm Mini lightbar: 463mm Solaris, 363mm rotators
Solaris LED colours:	blue, amber, red



REF. MOD.	DESCRIPTION	EURO
4000 Series		
Mini lightbars - Standard lengths: 463mm - 700mm		
MP4-2S1N	Basic Minilightbar, standard length, (2) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	571,02
MP4-2S2N	Basic Minilightbar, standard length, (2) rings of (15) high-intensity LEDs in (2) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	920,63
MP4-4S1N	Basic Minilightbar, maximum 700 mm, (4) rings of (15) high-intensity LEDs in (1) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	920,63
MP4-4S2N	Basic Minilightbar, maximum 700 mm, (4) rings of (15) high-intensity LEDs in (2) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	1.736,37
MP4-2S1N BI	Basic Minilightbar, standard length, (2) BICOLOUR rings of (15) high-intensity LEDs in (1) level, blue (UN 65 approved), amber (UN 65 approved) and/or red light, multivoltage, wiring harness	736,00
Specify All Options System - Standard lengths: 800mm - 1300mm		
P4-2S1N	Basic lightbar, standard length, (2) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	670,08
P4-2S2N	Basic lightbar, standard length, (2) rings of (15) high-intensity LEDs in (2) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	1.019,68
P4-4S1N	Basic lightbar, standard length, (4) rings of (15) high-intensity LEDs in (1) level with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	1.019,68
P4-4S2N	Basic lightbar, standard length, (4) rings of (15) high-intensity LEDs in (2) levels with parabolic reflector, blue (UN 65 approved), amber (UN 65 approved) or red light, multivoltage, wiring harness	1.835,43
P4-2S1N BI	Basic lightbar, standard length, (2) BICOLOUR rings of (15) high-intensity LEDs in (1) level, blue (UN 65 approved), amber (UN 65 approved) and/or red light, multivoltage, wiring harness	880,00
3000 Series		
Specify All Options System - Standard lengths: 700mm - 1300mm		
P3000M	600 mm minilightbar, (2) 360° strobe heads, wiring harness. UN R65 approved	473,58
P3000	(2) 360° Strobe heads, w/ power supply, wiring harness. UN R65 approved	564,74
P3000/4E	(4) 360° Strobe heads, w/ power supply, wiring harness.	680,36
2000 Series		
Specify All Options System - Standard lengths: 700mm - 1300mm		
P2000M	363 mm minilightbar, (2) belt-driven rotators, wiring harness. UN R65 approved	234,50
P2000	(2) Belt-driven rotators, wiring harness. UN R65 approved, 12V	378,05
P2000-24	(2) Belt-driven rotators, wiring harness. UN R65 approved, 24V	396,71
P2000/4R SY-12	(4) Belt-driven rotators, wiring harness. UN R65 approved, 12V	501,64
P2000/4R SY-24	(4) Belt-driven rotators, wiring harness. UN R65 approved, 24V	520,65
Options for 4000 Solaris, 3000 and 2000 Series		
Supplement for lengths		
A-SUPL/A1	Supplement for lengths between 1400 and 1600 mm	33,28
A-SUPL/A2	Supplement for lengths between 1700 and 1800 mm	77,64
A-SUP-SEP	Supplement separators various colors (1 per color)	22,00
(*) Flat mount kit included in price. Other mounts purchased separately		
Lighting Options		
A-R1 - 12/24V	(1) Rotator central section, H1 halogen lamp	74,03
A-FA702-2ES	(2) Directional strobe heads, with FA702 power supply	419,02
A-FF	(2) Takedown lights, H1 halogen lamp	59,73
A-FL	(2) Alley lights, H3 halogen lamp	73,89
A-WL	(2) Rear work light, H1 halogen lamp	59,73
A-SML1/A-I	(2) SML1, halogen lights, w/ flasher, amber	114,22
A-SML1/R-I	(2) SML1, halogen lights, w/ flasher, red	114,22
A-SML1/A	(2) SML1, halogen lights, w/o flasher, amber	71,15
A-SML1/R	(2) SML1, halogen lights, w/o flasher, red	70,81
A-LF SLR	(2) modules of (3) high-intensity LEDs with parabolic reflector, steady burn mode, blue, amber, red or white lights	152,68
A-LI SLR	(2) modules of (3) high-intensity LEDs with parabolic reflector, flashing mode, blue, amber, red or white lights	198,13
A-BTT/LED	(2) Brake/Tail/Turn lights LED	240,26
A-ESP	(2) Mirrors	20,62

REF.	MOD.	DESCRIPTION	EURO
Lighted Signs			
A-CIO-12		(1) Lighted opal sign w optional message, 12V	55,31
A-CIO-24		(1) Lighted opal sign w optional message, 24V	69,30
CIL1-A-12		(1) LEDs lighted opal sign w optional message, 12V	98,55
CIL1-A-24		(1) LEDs lighted opal sign w optional message, 24V	117,64
A-AD		(2) Adhesive messages for lighted sign	53,33
SignalMaster			
A-SL6 SLR		SignalMaster Solaris, directional lighting system, (6) modules of (3) high-intensity LEDs with parabolic reflector, w/o controller, specify colour red, amber or blue	389,27
A-SL8 SLR		SignalMaster Solaris, directional lighting system, (8) modules of (3) high-intensity LEDs with parabolic reflector, w/o controller, specify colour red, amber or blue	527,10
A-SL6KS SLR		SignalMaster Solaris, directional lighting system, (6) modules of (3) high-intensity LEDs with parabolic reflector, with controller, specify colour red, amber or blue	590,72
A-SL8KS SLR		SignalMaster Solaris, directional lighting system, (8) modules of (3) high-intensity LEDs with parabolic reflector, with controller, specify colour red, amber or blue	729,27
(*) Control purchased separately. See Signalmaster controllers or Integrated Control Systems ICS			
Mount Accesories			
8234087	A-FP/PA	Permanent mounting bracket, low	57,40
8234105	A-FP/PB	Permanent mounting bracket, high	56,25
8234104	A-FT	Hook-on mounting kit (hook-on not included)	66,27
8234148	A-FMG	Magnetic mount, 4000/3000/2000 minilightbars Series	60,81
8234150	A-FMG-12I	Magnetic mount, 4000/3000/2000 minilightbars Series with 12 magnets	251,09
	MCH	Cigarette plug	16,80
	A-CT19	Roof connector, 23-ways (for 3000/2000 Serie lightbar)	75,61
	A-CT23	Roof connector, 19-ways (for 4000 Serie lightbar)	99,34
4004536		Cover for 1100mm. (44")	26,90



MINI LEGEND



Federal Signal Vama develops and introduces the new, low-profile **Legend Solaris 24" Mini lightbar**. It provides a 360-degree coverage and superior off-axis warning and increased up-time for your fleet. On the other hand, Legend Solaris 24" Mini lightbar offers, in minimum space, technological advantages thanks to its special design:

- 360° DEGREE COVERAGE

Solaris technology and ROC design provides exceptional 360 degree coverage, which results in the elimination of any dark spots and superior off-axis warning around the lightbar.

- ROC TECHNOLOGY (Reliable Onboard Circuitry)

ROC technology eliminates 85% of potential failure points in the lightbar, reducing repair costs and increasing the hours your emergency vehicles stay on the road. ROC incorporates a printed circuit board in one assembly to reduce the amount of electrical connections found in a typical lightbar.

- INCREASED SECURITY

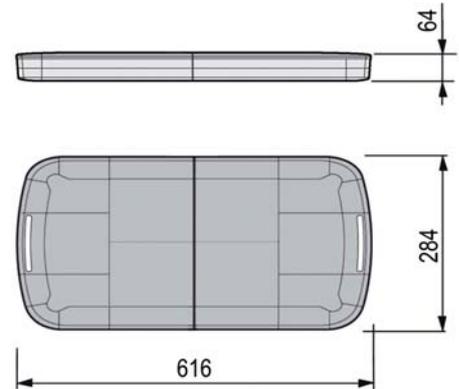
Better grip, stability and security to the vehicle on the road due to its less aerodynamic drag.

- COST SAVINGS

Less fuel consumption thanks to its low-profile and improved aerodynamics. Furthermore, ROC technology reduces repairing costs and it allows more vehicle rotation on the road.



Mini-Legend Solaris dimensions (mm).



Voltage:	12/24 V
Operating temperature:	-20°C to 50°C
Average consumption (flashing mode):	3.5 Amp (12V) / 2.5 Amp (24V)
LEDs colours:	Blue, amber and red
Lens colours:	Blue, amber and red
Dimensions:	616 x 284 x 64 mm
Weight:	7.500 g

REF.	MOD.	DESCRIPTION	EURO
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Legend 24" mini-lightbar (616 mm), 18 Solaris modules LED lights, non configurable, no CANBUS.

Magnetic mount

2059193	LGD24 PP FM	Legend Solaris Series lightbar, 616 mm, amber-amber, magnetic mount, cigarette plug, bitension, R65 class 1 approval.	887,78
2059154	LGD24 BB FM	Legend Solaris Series lightbar, 616 mm, blue-blue, magnetic mount, cigarette plug, bitension R65 class 1 and class 2 approval.	887,78
2059191	LGD24 RR FM	Legend Solaris Series lightbar, 616 mm, red-red, magnetic mount, cigarette plug, bitension R65 class 1 and class 2 approval.	887,78
2059195	LGD24 RB FM	Legend Solaris Series lightbar, 616 mm, red-blue, magnetic mount, cigarette plug, bitension.	887,78
2059197	LGD24 RP FM	Legend Solaris Series lightbar, 616 mm, red-amber, magnetic mount, cigarette plug, bitension.	887,78
2059199	LGD24 BP FM	Legend Solaris Series lightbar, 616 mm, blue-amber, magnetic mount, cigarette plug, bitension.	887,78

(*) Maximum speed for this model on the roof of the vehicle 200 km/h

Permanent mount

2059194	LGD24 PP FP	Legend Solaris Series lightbar, 616 mm, amber-amber, wiring harness, permanent mount, bitension, R65 class 1 approval.	835,25
2059155	LGD24 BB FP	Legend Solaris Series lightbar, 616 mm, blue-blue, wiring harness, permanent mount, bitension, R65 class 1 and class 2 approval.	835,25
2059192	LGD24 RR FP	Legend Solaris Series lightbar, 616 mm, red-red, wiring harness, permanent mount, bitension R65 class 1 and class 2 approval.	835,25
2059196	LGD24 RB FP	Legend Solaris Series lightbar, 616 mm, red-blue, wiring harness, permanent mount, bitension.	835,25
2059198	LGD24 RP FP	Legend Solaris Series lightbar, 616 mm, red-amber, wiring harness, permanent mount, bitension.	835,25
2059200	LGD24 BP FP	Legend Solaris Series lightbar, 616 mm, blue-amber, wiring harness, permanent mount, bitension.	835,25



MPL300 Series

LEDs and low profile **MPL300** mini lightbar Series, with an exceptional 360° degrees coverage, designed to increase emergency and services vehicle security. Their compact, low profile dimensions, allow to locate it on heavy duty vehicles critical points: trucks, vans, tow recovery, etc. Available on amber LED lights, amber or clear lens, and magnetic or single point mounting.

- 360° DEGREES COVERAGE

Specially designed to provide exceptional 360° coverage, avoiding shadows appearance around the mini lightbar.

- REDUCED DIMENSIONS AND WEIGHT

Small MPL300 Series lightbar dimension allows to locate at several critical points around the vehicle, taking no space on it.

- LOW PROFILE

Increased security and better vehicle grip on the road thanks to its low drag. Furthermore, there are fuel savings due to the minimum aerodynamic resistance of the vehicle.

- EASY INSTALATION AND VERSATILITY

Permanent version allows an easy installation in the vehicle thanks to its single point mounting. Besides, magnetic version allows temporality signalize any vehicle.

- APPROVALS

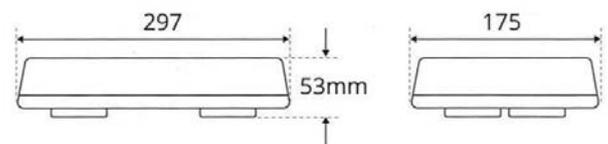
MPL300 Series is approved according to European normative R65 and to European Directive of Electromagnetic Compatibility R10.



MPL300 Series with magnetic mounting.



MPL300 Series with permanent mounting.



MPL300 Series mini lightbar dimensions (mm).

Voltage:	12/24V
LEDs number:	20
LEDs power:	3W
LEDs colour:	Amber
Lenses colour:	Amber or clear
Dimensions:	297x175x53
Permanent mounting weight:	1.035 gr
Magnetic mounting weight:	1.430 gr
N° flash patterns:	10
Consumption:	1.4A (12V)/0.7A(24V)

REF.	MOD.	DESCRIPTION	EURO
MPL300 mini-lightbar (297 mm), non configurable, no CANBUS			
Magnetic Mount			
	2010764A MPL300 FM	MPL300 Series lightbar, 297mm, amber LEDs, amber lens, magnetic mounting, cigarette plug, 12/24V, R65 class 1 approval	225,00
	2010761A MPL300 FM	MPL300 Series lightbar, 297mm, amber LEDs, clear lens, magnetic mounting, cigarette plug, 12/24V, R65 class 1 approval	225,00
Permanent Mount			
	2010767A MPL300 FP	MPL300 Series lightbar, 297mm, amber LEDs, amber lens, permanent mounting, 12/24V, R65 class 1 approval	225,00
	2010768A MPL300 FP	MPL300 Series lightbar, 297mm, amber LEDs, clear lens, permanent mounting, 12/24V, R65 class 1 approval	225,00



LM500-D Series

LM500-D Series combines technology warning light and siren Solaris compact LEDs manufactured in ABS with fiberglass and aluminum.

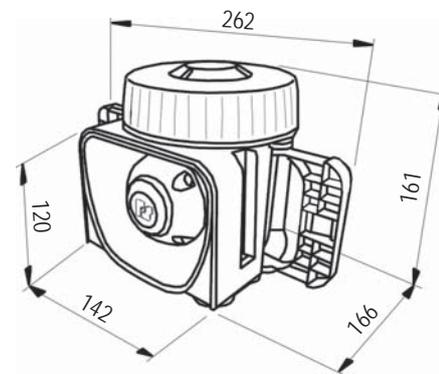
Optical system composed of a microprocessor integrated electronic circuit, 15 high intensity LEDs and a parabolic reflector maximizes light intensity of LEDs and avoids the appearance of black shadows.

His acoustic system consisting of a 30W speaker, with programmable tone, with a cigarette lighter socket 3 positions.

A wire mesh filter prevents the ingress of solid particles by the broadcaster of the siren, a drainage system prevents the accumulation of water in the membrane and a rubber gasket prevents water ingress into the electronic circuitry.

LM500-D Solaris, has a magnet system with a set of 4 magnets with silicone anti-scratch protection and 4 cups.

Available in blue, amber or red LED.



LM500-D Solaris Series dimensions (mm).

Voltage:	12 V
Light current consumption:	0.6 Amp
Siren current consumption:	3 Amp
Siren output power:	30W
Siren output voltage:	23 V
Operating temperature:	-20°C to 50°C
Weight:	2.28 kg

REF.	MOD.	DESCRIPTION	EURO
2003059	LM500-DP	Solaris LED warning light blue with integrated 30W siren. Cigarette plug w/ 3 positions for light and siren control, programmable tone, 12V. UN R65 Approval T Category	568,46
2003060	LM500-DP	Solaris LED warning light amber with integrated 30W siren. Cigarette plug w/ 3 positions for light and siren control, programmable tone, 12V. UN R65 Approval T Category	568,46
2003061	LM500-DP	Solaris LED warning light red with integrated 30W siren. Cigarette plug w/ 3 positions for light and siren control, programmable tone, 12V. UN R65 Approval T Category	568,46

(*) Maximum speed for this model on the roof of the vehicle 200 km/h.

(**) For other tones, please contact with the Sales Department.

(***) Magnetic mounting models produced for a temporary use on the roof of the vehicle.

GEMINIS Series

Federal Signal Vama presents the **dual colour warning light GEMINIS Series**, a single and dual colour omnidirectional LEDs priority light.

GEMINIS standard single colour and dual colour version allows combining 2 colours between blue, red and amber. Furthermore, this model can be chosen with permanent fixation DIN or magnetic mounting. According to R65 European Regulation Class 2.

GEMINIS-B incorporates a rechargeable battery, and it is available in single colour and dual colour (blue/amber) with magnetic mounting.

All models according to with IPX6 (*) and IPX9K (*) dust and water protection grades.

- DUAL COLOUR TECHNOLOGY

Thanks to this advanced product range and its improved bicolour technology, the priority light Geminis allows to combine 2 colours from: blue - amber, blue - red and red-amber.

- VERY COMPACT AND LIGHT

To guarantee its usage in an unexpected emergency situation, the magnetic version can be operated within one hand only, allowing a fast and simple setting.

- 360° LIGHT DISTRIBUTION

The applied technology and the special lens impression enables to maximize the beam light distribution in 360° around the vehicle, avoiding dark spots and shadows.

- PHOTOCELL SENSOR

For standard version, due to the photocell sensor included inside the Geminis magnetic version, the day/night function is changed automatically. This allows to be permanently adapted to lighting conditions.

- SYNCHRONIZABLE

For standard version, Geminis series allows the synchronization with other warning lights of the same product range.

- HIGH RESISTANCE

Polycarbonate and impact-resistant lens.

- PROTECTION AGAINST DUST AND WATER

Geminis Series according with IPX6 and IPX9K dust and water protection grades.

- THERMAL PROTECTION

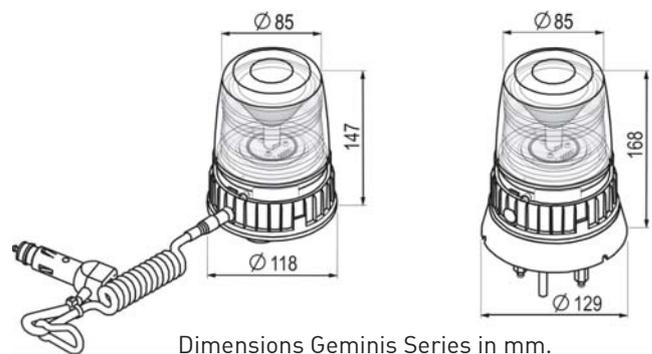
To avoid the overheating of the light due to high sun exposures, they include a thermal protection, a need in areas where the lights are exposed to extreme warm environments.

- WITH BATTERY

Magnetic mounting and battery version available.



Geminis-B



Dimensions Geminis Series in mm.

	12V-24V	Geminis-B
Voltage:	Multi-voltaje (10 - 30V)	12V
Operating temperature:	-30°C to + 60°C	-30°C to + 50°C
Consumption 12V (Maximum):	5,2 A (blue and amber) 4,4 A (red)	2,6 A (blue and amber)
Consumption 24V (Maximum):	3,4 A (blue and amber) 2,5 A (red)	-
Consumption 12V (Average):	1,7 A (blue and amber) 1,5 A (red)	1,0 A (blue and amber)
Consumption 24V (Average):	1,2 A (blue and amber) 0,8 A (red)	-
Cruise mode consumption:	0,3 A	-
Charging consumption:	-	2,0 A
Maintenance consumption:	-	0,05 A
Colors of LEDs:	Blue, red and amber	Blue and amber
Color of lenses:	Clear	Clear
Dimensions:	Permanent: 168 x 129mm Magnetic: 147 x 118mm	Magnetic: 147 x 118mm
Weight:	Permanent: 1.011 gr Magnetic: 1.210 gr	Light: 1.007 gr Cable: 163,5 gr
Mount:	Permanent DIN/ Magnetic	Magnetic
N° de Flash Patterns:	2 (QUAD R65 & S-A R65)	2 (QUAD R65 & S-A R65)
Flash frequency:	2 Hz	2 Hz
Flash rate (per/min):	120	120
Operation time/charging:	-	180 / 90 minutes

REF.	MOD.	DESCRIPTION	EURO
Magnetic mounting (*)			
2002409		Warning light, (1) level, (2) flash patterns, blue light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	526,00
2002411		Warning light, (1) level, (2) flash patterns, red light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	526,00
2002410		Warning light, (1) level, (2) flash patterns, amber light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	526,00
2002412		BICOLOUR Warning light, (1) level, (2) flash patterns, blue-red light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	580,00
2002403		BICOLOUR Warning light, (1) level, (2) flash patterns, blue-amber light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	580,00
2002413		BICOLOUR Warning light, (1) level, (2) flash patterns, amber-red light, clear lens, magnetic mount and cigarette lighter plug, multi voltage. R65 Class 2 (flash mode) approved.	580,00
(*) Maximum speed for this model on the roof of the vehicle 250 km/h.			
(**) Magnetic mounting models are produced for a temporary use on the roof of the vehicle.			
DIN Permanent mount			
2002405		Warning light, (1) level, (2) flash patterns, blue light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	511,00
2002407		Warning light, (1) level, (2) flash patterns, red light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	511,00
2002406		Warning light, (1) level, (2) flash patterns, amber light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	511,00
2002404		BICOLOUR Warning light, (1) level, (2) flash patterns, blue-red light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	565,00
2002402		BICOLOUR Warning light, (1) level, (2) flash patterns, blue-amber light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	565,00
2002408		BICOLOUR Warning light, (1) level, (2) flash patterns, amber-red light, clear lens, DIN permanent mount, multi voltage. R65 Class 2 (flash mode) approved.	565,00
Accessory			
8299997		Connector Kit for permanent mount	20,00

GEMINIS-B, MAGNETIC MOUNT AND WITH RECHARGEABLE BATTERY

2002414		Warning light LEDs, (1) level, (2) flash patterns, blue light, clear lens, rechargeable battery, magnetic mount and cigarette lighter plug, 12V. Not Homologated UN R65*	728,00
2002415		Warning light LEDs, (1) level, (2) flash patterns, blue-amber light, clear lens, rechargeable battery, magnetic mount and cigarette lighter plug, 12V. Not Homologated UN R65*	783,00

* The European regulation R65 does not allow to approve devices with power through rechargeable batteries, it is only allowed to approve devices with continuous power.



LM800 / LP800 Series

New LP/LM800 SOLARIS warning lights, with Solaris LED reflector technology of Federal Signal Vama provide excellent results as priority lights on emergency and undercover vehicles. It can be installed either permanently (LP models) and temporarily using strong magnets and suction cups (LM model). Other features are:

360° LIGHT BEAM DISTRIBUTION

Solaris technology and its special spreader lens maximizes light beam distribution through 360° around vehicle, avoiding dark spots.

- EVERY NEED SOLUTIONS

Beacon lights with 1 or 2 levels of 15 Solaris LED rings with blue, amber or red lights, permanent mount for emergency vehicles, or magnetic mount for undercover ones, etc.

- HIGH STRENGTH HOUSING

Durable shockproof polycarbonate lens with reinforced polyamide base. With IP protection IPX9K.

- SYNCRONIZABLE

LP800 Series could be synchronized with other Federal Signal Vama vehicle priority lights (LP400).



LM800



LP800

	LM800	LP800
Voltage:	12-24V	12-24V
Operating temperature:	-20°C to +50°C	-20°C to +50°C
Current draw (average):	1 A (blue and red) 0.6 A (amber)	1 Amp (blue and red) 0.6 Amp (amber)
LED colours:	Blue, red and amber	Blue, red and amber
Lens colours:	Blue, amber or red	Blue, amber, red or clear
Dimensions:	140 mm (diam - dome) 164 mm (diam - base) 120 mm (height)	140 mm (diam - dome) 164 mm (diam - base) 95 mm (height)
Weight:	1200 gr (1 level) 1300 gr (2 levels)	590 g (1 level) 700 g (2 levels)

REF.	MOD.	DESCRIPTION	EURO
Magnetic mounting (*)			
2003039	LM800 Solaris	(1) level, (2) flash patterns, light amber, amber lens, magnetic mount and cigarette lighter plug, dual voltage. R65 Class 1 (flash mode) approved.	303,10
2003040	LM800 Solaris	(1) level, (2) flash patterns, blue light, blue lens, magnetic mount and cigarette lighter plug, dual voltage. R65 Class 1 (flash mode) approved.	303,10
2003041	LM800 Solaris	(1) level, (2) flash patterns, red light, red lens, magnetic mount and cigarette lighter plug, dual voltage.	293,88
2003043	LM800 Solaris	(2) levels, (2) flash patterns, light amber, amber lens, day / night, magnetic mount and cigarette lighter plug, dual voltage. R65 Class 2 (flash mode) approved.	349,95
2003044	LM800 Solaris	(2) levels, (2) flash patterns, blue light, blue lens, day / night, magnetic mounting and cigarette lighter plug, dual voltage. R65 Class 2 (flash mode) approved.	349,95
2003042	LM800 Solaris	(2) levels, (2) flash patterns, red light, red lens, magnetic mount and cigarette lighter plug, dual voltage. (* Maximum speed for magnetic mount model on the roof of the vehicle to 200km / h. (**) Magnetic mounting models produced for a temporary use on the roof of the vehicle.	349,95
Permanent mount			
2003034	LP800 Solaris	(1) level, (8) flash patterns, light amber, amber lens, day / night and cruise light, permanent mount, dual voltage. R65 Class 1 (flash mode) approved.	235,75
2003026	LP800 Solaris	(1) level, (8) flash patterns, blue light, blue lens, day / night and cruise light, permanent mount, dual voltage. R65 Class 1 (flash mode) approved.	235,75
2003035	LP800 Solaris	(1) level, (8) flash patterns, red light, red lens, day / night and cruise light, permanent mount, dual voltage.	235,75
2003036	LP800 Solaris	(2) levels, (8) flash patterns, light amber, amber lens, day / night and cruise light, permanent mount, dual voltage. R65 Class 2 (flash mode) approved.	373,10
2003038	LP800 Solaris	(2) levels, blue light-amber, clear lens, permanent mount, dual voltage. R65 Class 1 (flash mode) approved.	373,10
2003027	LP800 Solaris	(2) levels, (8) flash patterns, blue light, blue lens, day / night and cruise light, permanent mount, dual voltage. R65 Class 2 (flash mode) and Class 1 (rotative mode) approved.	373,10
2003037	LP800 Solaris	(2) levels, (8) flash patterns, red light, red lens, day / night and cruise light, permanent mount, dual voltage.	373,10
Accessory			
8232795	BD-LP800	DIN base for LP800	47,54



LM400 / LP400 Series

New low profile LED beacons, which feature high luminosity, compact and aerodynamic design.

The Solaris Technology is formed by a high-efficiency PC board with integrated microprocessor, 15 high-luminosity LED diodes of the latest generation, integrated on the PC board and a parabolic reflector that maximises LEDs luminosity.

The **LM400 Solaris** model features a magnetic mounting kit with 2 magnets (with anti-scratch silicone) and 2 suction cups. It includes a cigarette lighter plug for easy power source connection.

This LED beacon is ideal for undercover police vehicles.

The **LP400 Solaris** is fitted out with a permanent mount and a rubber gasket improve for perfect adaptation to the roof.

The LP400 enables to connect two lights synchronized. Available colours in blue, red, amber and green.



LM400



LP400

	LM400	LP400
Voltage:	12V or 10-30V	12V or 10-30V
Operating temperature:	-20°C to +50°C	-20°C to +50°C
Current draw (average) in rotator mode:	1 Amp (blue, red and green) 0.6 Amp (amber)	1 Amp (blue, red and green) 0.6 Amp (amber)
Current draw (average) in flashing mode:	1 A (blue, red and green) 0.6 A (amber)	1 A (blue and red) 0.6 A (amber)
Light technology:	Solaris	Solaris
LED colours:	Blue, red, amber, green	Blue, red and amber
Lens colours:	Blue or clear	Blue, clear or red
Dimensions:	140 mm (diam - dome) 147 mm (diam - base) 80 mm (height)	140 mm (diam - dome) 147 mm (diam - base) 60 mm (height)
Weight:	616 g	395 g

REF.	MOD.	DESCRIPTION	EURO
Magnetic mounting:			
2002389	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, blue LEDs, magnetic mounting and cigarette lighter plug, 12V, R-65 approved.	236,39
2002392	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs latest generation, high luminosity, amber LEDs, clear lens, magnetic mounting and cigarette lighter plug, 12V, R-65 approved.	236,39
2002391	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, red LEDs, clear lens, magnetic mounting and cigarette lighter plug, 12V, R-65 approved.	236,39
2002401	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, red LEDs, red lens, magnetic mounting and cigarette lighter plug, 12V.	236,39
2002397	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, green LEDs, clear lens, magnetic mounting and cigarette lighter plug, 12V.	236,39
2003017	LM400SL	LED beacon, (2) flash pattern (rotator/flash), (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, blue LEDs, magnetic mounting and cigarette lighter plug, 10-30V, R-65 approved.	257,40
2003018	LM400SL	LED beacon, (2) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, amber LEDs, amber lens, magnetic mounting and cigarette lighter plug, 10-30V, R-65 approved.	257,40
2003020	LM400SL	LED beacon, (2) levels of light intensity (day/night), (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, blue LEDs, magnetic mounting and cigarette lighter plug, 10-30V, R65 class 2 approved.	257,40
2003053	LM400SL	LED beacon, (15) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, blue LEDs, magnetic mounting and cigarette lighter plug, 10-30V, R-65 approved.	257,40
2003024	LM401SL	LED beacon, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, blue LEDs, magnetic mounting and cigarette lighter plug, 10-30V, R65 approved, with selector for 360° or 180°.	257,40
Magnetic mounting BICOLOUR model			
2003076	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, blue/amber BICOLOUR LEDs, magnetic mounting, 10-30V, R-65 approved.	337,00
2003078	LM400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, red/blue BICOLOUR LEDs, magnetic mounting, 10-30V, R-65 approved.	337,00
(*) Maximum speed for magnetic mount model on the roof of the vehicle to 200km / h. (**) Magnetic mounting models produced for a temporary use on the roof of the vehicle.			
Permanent mount:			
2002390	LP400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, blue LEDs, permanent mount, 12V, R-65 approved.	183,86
2002393	LP400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, amber LEDs, clear lens, permanent mount, 12V, R-65 approved.	183,86
2002394	LP400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, red LEDs, clear lens, permanent mount, 12V, R-65 approved.	183,86
2003016	LP400SL	LED beacon, (8) flash patterns, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, blue LEDs, blue lens, permanent mount, 10-30V, R-65 approved.	204,87
2003019	LP400SL	LED beacon, (8) flash pattern and rotating effect, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, amber LEDs, amber lens, permanent mount, 10-30V, R-65 approved.	204,87
2003029	LP400SL	LED beacon, (2) levels of light intensity (day/night), (1) parabolic reflector with 15 LEDs, latest generation, high luminosity, blue LEDs, permanent mount, 10-30V, R65 class 2 approved.	204,87
2003030	LP400SL	LED beacon, (8) flash patterns, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, red LEDs, red lens, permanent mount, 10-30V, R-65 approved.	204,87
Permanent mount BICOLOUR model			
2003069	LP400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, blue/amber BICOLOUR LEDs, permanent mount, 10-30V, R-65 approved.	285,00
2003079	LP400SL	LED beacon, (1) flash pattern, (1) parabolic reflector with 15 LEDs, latest generation, high luminosity and cruise light, red/blue BICOLOUR LEDs, permanent mount, 10-30V, R-65 approved.	285,00



TRIDENT III Series

Federal Signal Vama presents the new new generation of lights **Trident III**, with a more modern and aerodynamic design.

The **Trident III** series is composed by Solaris LED warning lights and a searchlight.

The **Trident III** models are suitable for priority warning, or they can be combined with lightbars to increase the emergency lighting efficiency.

The **Trident III** Solaris series is composed of 1 level with 15 high-intensity LEDs and a parabolic reflector system that maximizes the luminosity of the LEDs.

The **Search Light** has a powerful light beam consisting of 6 high efficiency LEDs and a high focusing precision for lighting a work area.



TRIDENT III



TRIDENT III FB LED

	Trident III	Trident III FB LED Search light
Voltage:	10-30V	12V
Operating temperature:	-40 to +50° C	-40°C to +55°C
Average consumption:	Blue: 1 A (12V)	4A
Light technology:	Solaris	LEDs CREE XPE2 8333cd
LEDs colours:	Blue	White
Lenses colours:	Blue	Clear
Dimensions:	180 x 305 x 155 mm	180 x 305 x 155 mm
Weight:	1100gr	1150 gr (search light) 90 gr (remote control)

REF.	MOD.	DESCRIPTION	EURO
Trident III Solaris (*)			
2010728	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, right side, permanent mount, bitension for ALFA ROMEO GIULIETTA model. Base mounting kit already included	298,66
2010729	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, left side, permanent mount, bitension for ALFA ROMEO GIULIETTA model. Base mounting kit already included	298,66
2010741	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, right side, permanent mount, bitension for JEEP RENEGADE model. Base mounting kit already included	298,66
2010742	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, left side, permanent mount, bitension for JEEP RENEGADE model. Base mounting kit already included	298,66
2010743	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, right side, permanent mount, bitension for FIAT GRANDE PUNTO model. Base mounting kit already included	298,66
2010744	TRIDENT III LEDS	TRIDENT III with Solaris LED, blue light, 1 level, left side, permanent mount, bitension for FIAT GRANDE PUNTO model. Base mounting kit already included	298,66
(*) For other Trident III Series base mounting kits, please consult to our Commercial Department.			
Trident III Search Light			
2010701	TRIDENT III FB LEDS	TRIDENT III, LED search light, permanent mount, 12V (remote control head with cable included) for ALFA ROMEO GIULIETTA. Base mounting kit already included	716,55
2010703	TRIDENT III FB LEDS	TRIDENT III, LED search light, permanent mount, 12V (remote control head with cable included) for JEEP RENEGADE. Base mounting kit already included	716,55
2010745	TRIDENT III FB LEDS	TRIDENT III, LED search light, permanent mount, 12V (remote wireless control head included) for FIAT GRANDE PUNTO. Base mounting kit already included	716,55
(*) For other Trident III Series base mounting kits, please consult to our Commercial Department.			
Trident III Accessory			
8216151	MC-TRIDENT II FB	Remote control head with spiral cable, 12V	70,03

LE106 Series

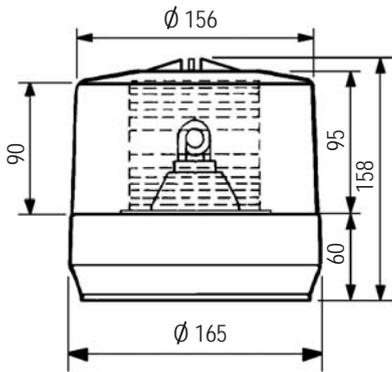
This series stands out for its high-efficiency strobe warning lights with Xenon lamps and bivoltage power supplies with a flash frequency of 120 fpm.

The beacon has a double lens system for light dispersion, colour and protection. The inner Fresnel lens distributes the light. The outer lens in different colours protects the unit and serves as waterproof cover.

The **LE106 series** consists of the following models:

- **LE106DCH:** Strobe beacon with lamp failure detection, low intensity, synchronised function option, optional cruise light and permanent mount.
- **LE106CH/MAG:** Strobe beacon with magnetic mount, suction pads and cigarette plug.
- **LE106HE:** Best value strobe beacon with permanent mount.

It is possible to install these beacons either on surface or on a DIN tube with connector.



LE106 Series dimensions (mm).



Voltage:	Bitension (12 / 24 V)
Average consumption:	12V: 2.3 Amp 24V: 1.4 Amp
Strobe lamp:	35 W
Dimensions:	165 (diameter) x 158 mm
Weight:	800 g



BD-106 Base adapter



M-106 Adapter base joint, slopy surfaces (angles up to 4°).



AD-015 Adapter base joint, slopy surfaces (angles up to 4°).



JB-015 Adapter base joint, curved surfaces.

REF.	MOD.	DESCRIPTION	EURO
2002349	LE-106HE	Strobe beacon, double lens, permanent mount, blue, bitension. UN R65 approved	154,01
2002350	LE-106HE	Strobe beacon, double lens, permanent mount, amber, bitension. UN R65 approved	154,01
2002388	LE-106HE	Strobe beacon, double lens, permanent mount, red, bitension	154,01
2002314	LE-106DCH	Strobe beacon, double lens, 15J, failure detection, synchro, w/ power supply, permanent mount, blue, bitension. UN R65 approved	250,69
2002319	LE-106DCH	Strobe beacon, double lens, 15J, failure detection, synchro, w/ power supply, permanent mount, amber, bitension. UN R65 approved	250,69
2002312	LE-106CH	Strobe beacon, double lens, 15J, w/ power supply, permanent mount, blue, bitension. UN R65 approved	229,63
2002311	LE-106CH	Strobe beacon, double lens, 15J, w/ power supply, permanent mount, amber, bitension. UN R65 approved	229,63
2002337	LE-106CH/MAG	Strobe beacon, double lens, 15J, w/ power supply, magnetic mount, blue, bitension. UN R65 approved	305,01
2002338	LE-106CH/MAG	Strobe beacon, double lens, 15J, w/ power supply, magnetic mount, red, bitension	305,01

Mount Accesories

8232386	BD-106	DIN 14620 Mount kit, LE-106	24,55
9133996	AI-106	Adaptor ring for roof inclination, LE-106DCH	5,58
8232387	BD-015	Base adapter, DIN pipe mount ISO4148, LR-015 and LE-106HE	23,36
9133980	JB-015	Adapter base joint for LR-015 and LE-106HE	7,43
9133997	AD-015	Adapter base joint for LR-015 and LE-106HE on slopy surfaces (angles up to 4°)	5,69
9133924	M-106	Adapter base joint for LE-106DCH	3,18



LR015 Series

Rotating beacon with silent belt-driven transmission. The carefully developed design means that the vibrations caused by the motor are isolated, enabling the low noise level of the **LR015** to be attained. A round rubber joint is assembled between the base and the vehicle for ensuring the correct adaptation of the unit with the curves in the vehicle.

It is possible to install this beacon either on surface or on a DIN tube with connector.



Voltage:	12 or 24 V
Halogen lamp:	H1 of 55 W (12 V) or 70 W (24 V)
Average consumption:	4.6 Amp (12 V), 2.3 Amp (24 V)
Dimensions:	O 165 x 153 mm
Weight:	900 g



BD-015 Base adapter



JB-015 Adapter base joint, curved surfaces.



AD-015 Adapter base joint, slopy surfaces (angles up to 4°).

REF.	MOD.	DESCRIPTION	EURO
2001319	LR-015	150 FPM Belt-driven rotator beacon, 150mm, 55W halogen lamp, permanent mount, blue, 12V. UN R65 approved	96,63
2001321	LR-015	150 FPM Belt-driven rotator beacon, 150mm, 70W halogen lamp, permanent mount, blue, 24V. UN R65 approved	97,99
2001318	LR-015	150 RPM Belt-driven rotator beacon, 150mm, 55W halogen lamp, permanent mount, amber, 12V. UN R65 approved	96,63
2001320	LR-015	150 FPM Belt-driven rotator beacon, 150mm, 70W halogen lamp, permanent mount, amber, 24V. UN R65 approved	97,99

Mount Accesories

8232387	BD-015	Base adapter, DIN pipe mount ISO4148, LR-015 and LE-106HE	23,36
9133980	JB-015	Adapter base ring for LR-015 and LE-106HE on slopy surfaces (angles up to 4°)	7,43
9133997	AD-015	Adapter base joint for LR-015 and LE-106HE	5,69



IWS modules Integrated Warning System

IWS Integrated Warning System for emergency vehicles, a powerful light solution with several last generation Solaris LED modules distributed all over vehicle perimeter, providing an exceptional 360° degrees coverage around this vehicle at any emergency situation.

- SOLARIS TECHNOLOGY

Composed by modules of 3 latest-generation Solaris LEDs with parabolic reflector, high intensity and low consumption.

- COMPACT

Its compact low profile design allows installation in limited spaces.

- LONG LIFE

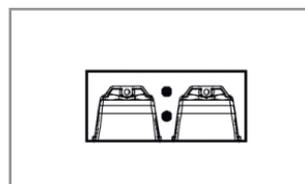
Federal Signal Vama's LED technology guarantees a long warning light life, helps to reduce maintenance costs, and increases vehicle rotation.

- EVERY NEED SOLUTIONS

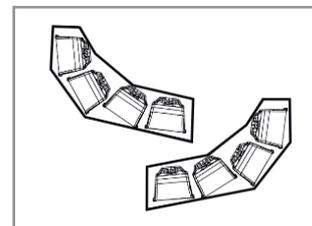
Easy to install and with a wide range of solutions: day/night mode, cruise light, multivoltage references, blue, amber, red or white LEDs, with or without flasher, etc.



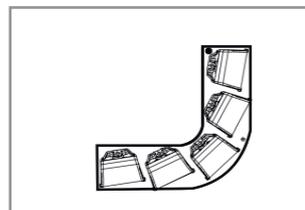
Sets of 2 modules Solaris



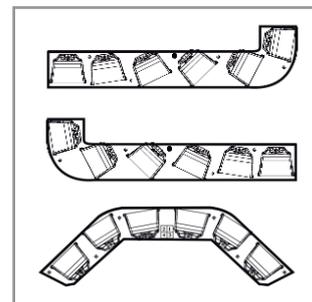
Sets of 4 modules Solaris



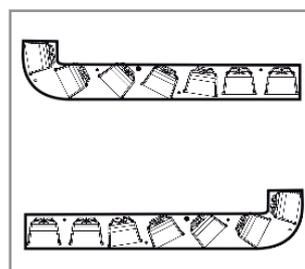
Sets of 5 modules Solaris



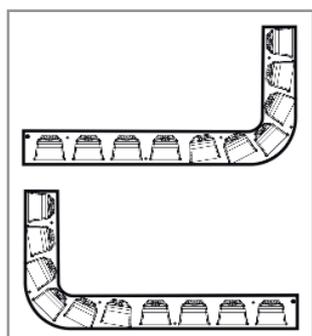
Sets of 6 modules Solaris



Sets of 7 modules Solaris



Sets of 10 modules Solaris



REF.	MOD.	DESCRIPTION		EURO
		Sets of 2 modules Solaris	dimensions mm	
8299895B		Set of 2x3LED modules in blue and bitension with cruise lights and day/night functions.	132x58x40	107,48
8299844B		6 Sets of 2x3LED modules in blue and bitension with cruise lights and day/night functions.	132x58x40	644,88
8235975W		Set of 2x3LED modules in white and 12V.	132x58x40	107,48
8299895R		Set of 2x3LED modules in red and bitension with cruise lights and day/night functions.	132x58x40	107,48
8299936A		Set of 2x3LED modules in amber and bitension with cruise lights.	132x58x40	107,48
8299936R		Set of 2x3LED modules in red and bitension with cruise lights.	132x58x40	107,48
		Sets of 4 modules Solaris		
8299849B		Set of 4x3LED modules in blue and bitension (rear-right / front-left) with cruise lights and day/night functions.	159x203,40x40	214,96
8299849A		Set of 4x3LED modules in amber and bitension (rear-right / front-left) with cruise lights and day/night functions.	159x203,40x40	214,96
8299849R		Set of 4x3LED modules in red and bitension (rear-right / front-left) with cruise lights and day/night functions.	159x203,40x40	214,96
8299850B		Set of 4x3LED modules in blue and bitension (rear-left / front-right) with cruise lights and day/night functions.	159x203,40x40	214,96
8299850A		Set of 4x3LED modules in amber and bitension (rear-left / front-right) with cruise lights and day/night functions.	159x203,40x40	214,96
8299850R		Set of 4x3LED modules in red and bitension (rear-left / front-right) with cruise lights and day/night functions.	159x203,40x40	214,96
		Sets of 5 modules Solaris		
8299816B		Set of 5x3LED modules in blue and 12V. 90° shape	206x206x40	268,70
8299935A		Set of 5x3LED modules in amber and 12V. 90° shape	206x206x40	268,70
8299935R		Set of 5x3LED modules in red and 12V. 90° shape	206x206x40	268,70
		Sets of 6 modules Solaris		
8299821B		Set of 6x3LED modules in blue and bitension (rear-left / front-right) with cruise lights and day/night functions.	390x96x40	322,44
8299822B		Set of 6x3LED modules in blue and bitension (rear-right / front-left) with cruise lights and day/night functions.	390x96x40	322,44
8299815BBIT		Set of 6x3LED modules in blue and bitension. "U" shape	393,42x124,34x40	322,44
		Sets of 7 modules Solaris		
8299843B		Set of 7x3LED modules in blue and bitension (rear-right / front-left) with cruise lights and day/night functions.	458x96x40	376,18
8299842B		Set of 7x3LED modules in blue and bitension (rear-left / front-right) with cruise lights and day/night functions.	458x96x40	376,18
		Sets of 10 modules Solaris		
8299825B		Set of 10x3LED modules in blue and bitension (rear-right / front-left) with cruise lights and day/night functions.	489x249x40	537,40
8299826B		Set of 10x3LED modules in blue and bitension (rear-left / front-right) with cruise lights and day/night functions.	489x249x40	537,40
		Rectangular module with collimator		
8299938B		(1) Rectangular module with 8 LEDs in blue, bitension with cruise light and day/night function.		93,47
8299938A		(1) Rectangular module with 8 LEDs in amber, bitension with cruise light and day/night function.		93,47
8299938R		(1) Rectangular module with 8 LEDs in red, bitension with cruise light and day/night function.		279,80
8299986R		(1) Rectangular module, 3 red LEDs, bitension, cruise light, day/night mode.		279,80
8299987R		(1) Rectangular module, 3 red LEDs, bitension, cruise light, day/night mode.		406,50
8299988R		(3) Rectangular modules, 3 red LEDs, bitension, cruise light, day/night mode.		406,50
8299989R		(3) Rectangular modules, 3 red LEDs, bitension, cruise light, day/night mode.		614,59
8299990R		(4) Rectangular modules, 3 red LEDs, bitension, cruise light, day/night mode.		614,59
8299991R		(4) Rectangular modules, 3 red LEDs, bitension, cruise light, day/night mode.		614,59
		Mount Accesories		
2006035	MLP-F4	External flasher for 4 lights, (8) flash patterns (flash UN R65 included), multivoltage		65,91
2006030	MLP-F8	External flasher for 8 lights, (8) flash patterns (flash UN R65 included), multivoltage		82,39
		(*) For A R65 regulations in these emergency lights, they must be approved together with the lenses and the type of vehicle installation.		



SUPPLEMENTAL WARNING LIGHTS

➤ Directional LEDs lights.....	50
➤ Directional warning lights.....	60
➤ LED signs.....	62

NANOLED Series

Federal Signal Vama introduces the new **Nanoled series**, the new and revolutionary ultra compact warning lights comprising of 6 LEDs. Thanks to its small size, light weight, easy installation and great light intensity, the Nanoled series break with standard products existing in the market, revealing a versatile installation and increasing security in emergency situations.

Nanoled series incorporate 6 multivoltage LED lights (10-30V), providing higher light intensity and improving energy efficiency. Its LED lights assure a long operational life, reducing maintenance costs and increasing vehicle's life.

Its range includes single colour and dual colour lights, both available with a variety of flash patterns, to correctly satisfy the different market needs.

- EXTREMELY COMPACT

Especially designed to be lighter and more compact than ever.

- THE HIGHEST INTENSITY

The 6 LED lights included in the Nanoled series improve energy efficiency and light intensity, providing more security in vehicles when there is an emergency situation.

- SINGLE COLOUR OR DUAL COLOUR LIGHTS

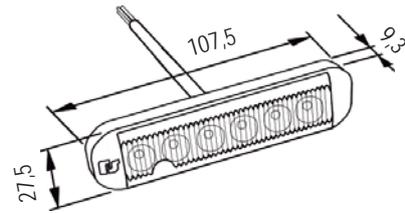
Its range includes single colour (same colour for all 6 LEDs) or dual colour lights (3 LEDs in each colour).

- LONG OPERATIONAL LIFE

Federal Signal Vama's LED technology guarantees a long operational life for this supplemental warning light, reducing maintenance costs and vehicle's life.

- EASY AND VERSATILE INSTALLATION

Thanks to its reduced dimensions, weight and mounting accessories availability, its installation is very easy.



Nanoled dimensions in mm.

- SOLUTION FOR ANY MARKET NEEDS

As a result of having several light colours and due to its versatility, Nanoled series lights can be integrated in the grill, inside or outside the vehicle, in the trunk or in the vehicle's rear part.

- WATER PROTECTION

Follow protection certification IPX9K IPX6.

- CONNECTION SIMPLICITY

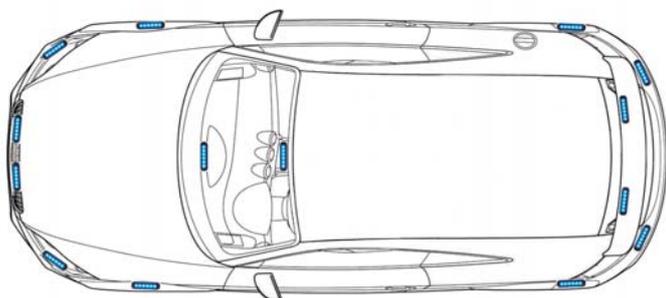
Nanoled's installation only requires one cable and its installation is made from vehicle's outside part.

- SYNCHRONIZABLE

Nanoled series allows simultaneous or alternative synchronization up to 12 lights.

- CRUISE LIGHT

Cruise light option for blue, red or amber lights.



Several installation possibilities

Voltage:	Multivoltaje (10-30V).
Number of LEDs:	6 (single colour or dual colour).
Consumption 12V:	Flash pattern: 0.75 Amp.
Consumption 24V:	Flash pattern: 0.45 Amp.
Flash pattern (single colour):	7
Flash pattern (dual colour):	16
Operating temperature:	-40 to 80°C.
Dimensions (with bezel):	107,5 x 27,5 x 9,3mm.
Dimensions (without bezel):	104 x 24 x 9,3 mm.
Weight:	42 gr.



REF.	MOD.	DESCRIPTION	EURO
2010718	Nanoled	Nanoled, LED directional light, amber/amber, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved.	135,00
N 2010718-01	Nanoled	Nanoled, LED directional light, amber/amber, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved with cruise light	140,00
2010709	Nanoled	Nanoled, LED directional light, amber/amber, clear lens, with flasher, multivoltage 10-30V. UN R65 class 2 approved.	140,00
2010712	Nanoled	Nanoled, LED directional light, white/amber, clear lens, with flasher, multivoltage 10-30V.	135,00
2010710	Nanoled	Nanoled, LED directional light, blue/amber, clear lens, with flasher, multivoltage 10-30V.	135,00
2010705	Nanoled	Nanoled, LED directional light, blue /blue, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved.	135,00
2010705-02	Nanoled	Nanoled, LED directional light, blue/blue, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved with cruise light	140,00
2010707	Nanoled	Nanoled, LED directional light, blue /blue, clear lens, with flasher, multivoltage 10-30V. UN R65 class 2 approved.	140,00
2010713	Nanoled	Nanoled, LED directional light, blue/white, clear lens, with flasher, multivoltage 10-30V.	135,00
2010708	Nanoled	Nanoled, LED directional light, blue/red, clear lens, with flasher, multivoltage 10-30V.	135,00
2010717	Nanoled	Nanoled, LED directional light, red/red, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved.	135,00
N 2010717-01	Nanoled	Nanoled, LED directional light, red/red, clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved with cruise light	140,00
2010711	Nanoled	Nanoled, LED directional light, red/red, clear lens, with flasher, multivoltage 10-30V. UN R65 class 2 approved.	140,00
2010723	Nanoled	Nanoled, LED directional light, amber/red, clear lens, with flasher, multivoltage 10-30V.	135,00
2010714	Nanoled	Nanoled, LED directional light, red/white, clear lens, with flasher, multivoltage 10-30V.	135,00
2010706	Nanoled	Nanoled, LED directional light, white/white, clear lens, with flasher, multivoltage 10-30V.	135,00
Nanoled with independent light control 3+3			
2010746	Nanoled	Nanoled, LED directional light, 3 blue + 3 amber LEDs clear lens, with flasher, multivoltage 10-30V. UN R65 class 1 approved with independent light control	140,00
2010732	Nanoled	Nanoled, LED directional light, 3 blue + 3 white LEDs, clear lens, with flasher, multivoltage 10-30V, with independent light control	140,00
2010733	Nanoled	Nanoled, LED directional light, 3 blue + 3 red LEDs, clear lens, with flasher, multivoltage 10-30V, with independent light control	140,00
2010734	Nanoled	Nanoled, LED directional light, 3 amber + 3 red LEDs, clear lens, with flasher, multivoltage 10-30V, with independent light control	140,00
2010735	Nanoled	Nanoled, LED directional light, 3 red + 3 white LEDs, with flasher, multivoltage 10-30V, with independent light control	140,00
2010736	Nanoled	Nanoled, LED directional light, 3 white + 3 amber LEDs, with flasher, multivoltage 10-30V, with independent light control	140,00
Area lighting Nanoled			
2010727	Nanoled	Nanoled, directional area LED light white-white/clear lens, no flasher, multivoltage	140,00
Mount Accesories			
2010721	Nanoled	Cromed Bezel (optional)	7,00
8232851	Nanoled	Simple "L" mounting accessory	14,54
8232852	Nanoled	Double "L" horizontal mounting accessory	18,42
8232853	Nanoled	Double "L" vertical mounting accessory	18,42
8232854	Nanoled	Swivelling mounting accessory	24,27
8232893	Nanoled	Hood support with adhesive or screwed bracket	28,30
8232894	Nanoled	Hood support with metal bracket	36,14
8232863	Nanoled	Grille support for VW Crafter	6,81
8232864	Nanoled	Grille support for Renault Master	6,18
8232865	Nanoled	Right Grille support for Sprinter	7,90
8232866	Nanoled	Left Grille support for Mercedes Sprinter	7,90
8232868	Nanoled	Grille support for Mercedes Vito	6,32
8232867	Nanoled	2 racks grill support for VW T6	6,95
8232870	Nanoled	3 racks grill support for VW T6	7,72

(*) All models include a black bezel.

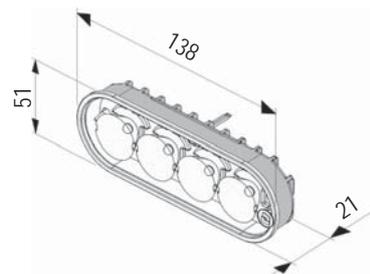
MICROLED PLUS Series

MicroLed Plus is an ultra-compact high intensity LED light inspired on MicroLed Sputnik. Its new design incorporates the latest technological advances and provides improved high-luminosity, high dissipation capacity and watertightness. Jointed with the external flasher MLP-F4 MicroLED Plus complies with the European Regulation R65, category X.

The MicroLed Plus, formed by 4 3W Sputnik LEDs is a steady burn light, which can be connected to different FSV products, like controllers ICS, siren-amplifiers, Intelli flashers, FA3 flashers, etc. Its small size makes this light the flattest on the market, facilitating the installation on any surfaces. The external flasher MLP offers connection up to 4 or 8 MicroLeds Plus, 8 flash patterns and 2 channels. This flasher unit could be controlled by external switches.

The MicroLed Plus and the MLP-4F/MLP-8F flasher are multivoltage models, which provide the greater versatility.

2 mounting kits and different colour versions are available.



MicroLed Plus dimensions (mm).

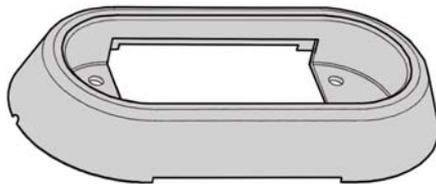
Voltage:	Multivoltage (10-30 V)
Average consumption (Flashing mode):	1.6 Amp (12 V) 0.8 Amp (24 V)
Dimensions:	138 x 51 x 21 mm

REF.	MOD.	DESCRIPTION	EURO
Spreader lens models			
2010419	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, blue light, blue lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010420	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, blue light, clear lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010421	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, white light, amber lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010422	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, amber light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010423	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, red light, red lens, w/o flasher, cruise light, multivoltage	150,86
2010424	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, red light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010520	MicroLed Plus	MicroLed Plus interior or scene light with two light intensity (high and low), white light, clear spreader lens, multivoltage	150,86
Smooth lens models			
2010427	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, blue light, blue lens, w/o flasher, cruise light, multivoltage	150,86
2010428	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, blue light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010425	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, white light, amber lens, w/o flasher, cruise light, multivoltage	150,86
2010426	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, amber light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010429	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, red light, red lens, w/o flasher, cruise light, multivoltage	150,86
2010430	MicroLed Plus	MicroLed Plus, Sputnik LED directional light, red light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010521	MicroLed Plus	MicroLed Plus interior or scene light, white light, clear smooth lens, multivoltage	150,86
MicroLED Plus-V - vertical mount			
2010433	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, blue light, blue lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010434	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, blue light, clear lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010431	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, white light, amber lens, w/o flasher, cruise light, multivoltage. UN R65 approved	150,86
2010432	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, amber light, clear lens, w/o flasher, cruise light, multivoltage	150,86
2010435	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, red light, red lens, w/o flasher, cruise light, multivoltage	150,86
2010436	MicroLed Plus-V	MicroLed Plus-V, Sputnik LED directional light, red light, clear lens, w/o flasher, cruise light, multivoltage	150,86

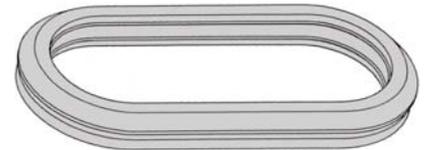
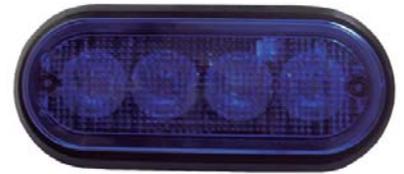
REF.	MOD.	DESCRIPTION	EURO
Installation Accesories			
2006035	MLP-F4	External flasher for MicroLed Plus, (8) flash patterns (UN R65 flash included), multivoltage	65,91
2006030	MLP-F8	External flasher for (8) lights, (8) flash patterns (UN R65 flash included), multivoltage	82,39
Mount Accesories (Choose one kit when order)			
2010437	MLP-SUP	Surface mount kit, (1) joint, MicroLed Plus	5,54
2010438	MLP-EMP	Flush mount kit, (1) joint, MicroLed Plus	5,36



External flasher



Surface mount kit joint, MicroLed Plus



Flush mount kit joint, MicroLed Plus



MICROLED Advance Series

Microled Advance supplemental warning LED light offers additional security on emergency situations, and could be installed in almost every place of all emergency vehicle types: rear deck, rearview mirrors, grilles, bumpers, etc. Its main features are:

- HIGH INTENSITY

An ultimate technology LED lights and lenses provide efficient distribution of warning power. Microled Advance offers maximum optical performance with minimal amperage draw.

- LONG LIFE

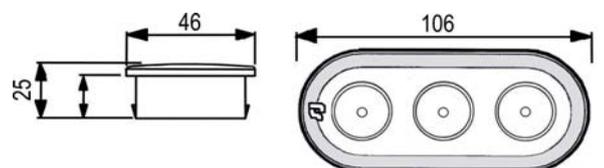
Federal Signal Vama's LED technology guarantees a long warning light life, helps to reduce maintenance costs, and increases vehicle rotation.

- EVERY NEED SOLUTIONS

Easy to install and with a wide range of solutions: multivoltage references, blue, amber, red or clear lenses, with or without flasher, etc.

- WATERPROOF HOUSING

High density silicone rear sealed, avoiding dust and / or water penetration inside the circuit board. IP protection grade IP9K.



MicroLed Advance dimensions (mm).

	W/O FLASHER	WITH FLASHER	R65
Voltage:	Multivoltage (10-30V)	Multivoltage (10-30V)	Multivoltage (10-30V)
Number of LEDs:	3 x 2 W	3 x 2 W	3 x 2 W
Average consumption:	0.2 Amp (Ref. 2010589, 0.4A)	0.4 Amp	0.4 Amp
Average consumption (flashing mode):	0.2 Amp	0.4 Amp (blue, white and green) 0.2 Amp (amber, red)	0.4 Amp (blue, amber) 0.3 Amp (red)
Flash patterns:	8 or steady burn	8 + steady burn	R65 + 7 + steady burn
Weight:	80 g	80 g	80 g
Dimensions:	106 x 46 x 25 mm	106 x 46 x 25 mm	106 x 46 x 25 mm



REF.	MOD.	DESCRIPTION	EURO
Spread R65 lens			
2010595	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, white light, amber spread lens, multivoltage	99,88
2010596	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, blue spread lens, multivoltage	99,88
2010597	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, clear spread lens, multivoltage	99,88
2010598	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, clear spread lens, multivoltage	99,88
2010599	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, red spread lens, multivoltage	99,88
Smooth and fresnel V15 lens w/ flasher			
2010573	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, amber light, amber smooth lens, w/flasher, multivoltage	67,62
2010580	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, amber light, amber Fresnel V15 lens, w/flasher, multivoltage	67,62
2010574	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, amber light, clear smooth lens, w/flasher, multivoltage	67,62
2010581	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, amber light, clear Fresnel V15 lens, w/flasher, multivoltage	67,62
2010570	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, blue smooth lens, w/flasher, multivoltage	67,62
2010578	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, blue Fresnel V15 lens, w/flasher, multivoltage	67,62
2010571	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, clear smooth lens, w/flasher, multivoltage	67,62
2010579	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, blue light, clear Fresnel V15 lens, w/flasher, multivoltage	67,62
2010576	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, clear smooth lens, w/flasher, multivoltage	67,62
2010583	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, clear Fresnel V15 lens, w/flasher, multivoltage	67,62
2010575	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, red smooth lens, w/flasher, multivoltage	67,62
2010582	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, red light, red Fresnel V15 lens, w/flasher, multivoltage	67,62
2010577	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, green light, clear smooth lens, w/flasher, multivoltage	67,62
2010572	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, white light, clear smooth lens, w/flasher, multivoltage	67,62
2010590	MicroLed Advance	Microled Advance LED directional light, master/slave, 3 LEDs of 2W, white light, clear Fresnel V15 lens, w/flasher, multivoltage	67,62
Mount Accesories*			
2010230		Surface mount kit, (2) joints, (surface mount)	6,32
2010231		Flush mount kit, (2) joints, (flush mount)	7,03
2010279		L Bracket for permanent mounting	17,77
81523056		Fixation platen, 1 Microled Advance**	8,28
* Choose a mounting kit when ordering.			
** Should be folded by the installer.			

IMPAXX Series **IMPAXX**

The Impaxx LED lights Series provide, with the Solaris exclusive technology from Federal Signal Vama, an excellent luminosity on emergency situations, intersections, etc. It has several flash patterns synchronized with other Impaxx lights. Furthermore, Impaxx Series has more advantages:

- EASY, VERSATILE INSTALLATION

Specially designed to be quickly mounted, with a minimum manipulation. Thanks to its compact dimensions, it could be installed on every part of the vehicle. All models are multivoltage (10-30 V).

- COST SAVINGS

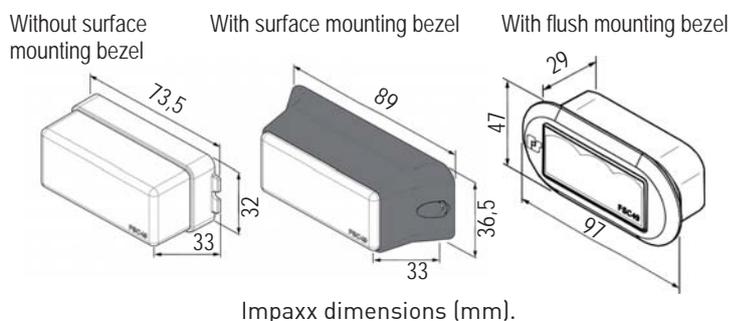
Less installations costs. High reliability and durability provide low maintenance costs.

- WATERPROOF HOUSING

Resistant to weather conditions. With IP protection IP6K9K.

- LOW AMP DRAW AND LONG LIFE

Optimizes vehicle battery performance.



Voltage:	10-30 V
Average consumption:	0.4 Amp (12V), 0.25 Amp (24V) R65: 0.6 Amp (12V), 0.4 Amp (24V)
Flash patterns:	23
Weight:	140 g
Dimensions:	89 x 33 x 36.5 mm

REF.	MOD.	DESCRIPTION	EURO
Spreader lens models R65 homologated*			
IPX320-BH	IMPAXX	Impaxx, blue LED and clear lens, with integrated flasher, multivoltage 10-30V.	103,62
IPX322-BH	IMPAXX	Impaxx, blue LED and blue lens, with integrated flasher, multivoltage 10-30V.	103,62
IPX320-AH	IMPAXX	Impaxx, amber LED and clear lens, with integrated flasher, multivoltage 10-30V.	103,62
IPX322-AH	IMPAXX	Impaxx, amber LED and amber lens, with integrated flasher, multivoltage 10-30V.	103,62
Spreader lens*			
IPX300-A	IMPAXX	Amber LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX300-B	IMPAXX	Blue LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX300-G	IMPAXX	Green LED and clear lens, with integrated flasher, multivoltage 10-30V.	134,76
IPX300-R	IMPAXX	Red LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX300-W	IMPAXX	White LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX302-A	IMPAXX	Amber LED and amber lens, with integrated flasher, multivoltage 10-30V.	114,40
IPX302-B	IMPAXX	Blue LED and blue lens, with integrated flasher, multivoltage 10-30V.	114,40
IPX302-R	IMPAXX	Red LED and red lens, with integrated flasher, multivoltage 10-30V.	114,40
Smooth lens*			
IPX310-A	IMPAXX	Amber LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX310-B	IMPAXX	Blue LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX310-R	IMPAXX	Red LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX310-W	IMPAXX	White LED and clear lens, with integrated flasher, multivoltage 10-30V.	108,58
IPX312-A	IMPAXX	Amber LED and amber lens, with integrated flasher, multivoltage 10-30V.	114,40
IPX312-B	IMPAXX	Blue LED and blue lens, with integrated flasher, multivoltage 10-30V.	114,40
IPX312-R	IMPAXX	Red LED and red lens, with integrated flasher, multivoltage 10-30V.	114,40
Mount Accesory			
IPXM-1	IMPAXX	Chrome bezel for surface mounting.	24,14
2010653	IMPAXX	Ruber bezel for built-in mounting	9,16
81523427	IMPAXX	Mounting plate "L"	4,03

* Mounting black bezel included on all models.

LD116 Advance Series

Federal Signal Vama presents the upgraded version of LEDs compact lights for **LD116 Advance Series**, the most modular light of our lights especially designed for emergency vehicles.

- HIGH INTENSITY

Latest generation Advance Technology LEDs, provides light output and longest lifetime.

- A SOLUTION FOR EVERY NEED

The wide range of mounting kits makes this compact light very flexible, offering solutions all over the vehicle perimeter.

- APPROVALS

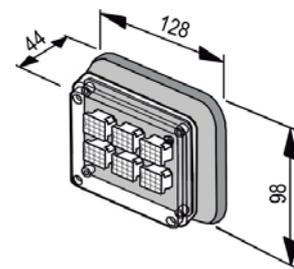
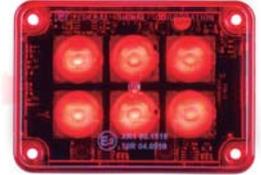
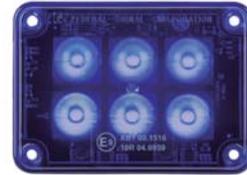
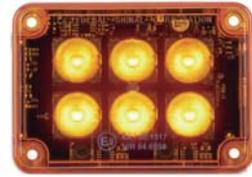
According to R65 and R10 European Regulations.

- WATERPROOF HOUSING

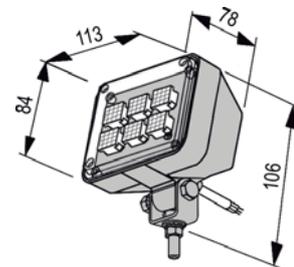
High-density silicone rear sealed avoiding dust and/or water penetration inside the circuit board IP9K Approved.

- LONG LIFE

Federal Signal Vama's LED technology guarantees a long warning light life, helps to reduce maintenance costs, and increases vehicle rotation.



LD116 Advance dimensions (mm)
Surface mounting kit.



LD116 Advance dimensions (mm)
Swivel mounting kit.

Operating voltage:	Multivoltage (10–30V)
Operating temperature:	-20° / +50°
Dimensions:	109x79x22,5 mm

REF.	MOD.	DESCRIPTION	EURO
2010674CR	LD116 ADV	Directional Advance LED light, amber LED, amber lens, w/flasher and cruise light, multivoltage, R65 Class 1 approved.	126,00
2010673CR	LD116 ADV	Directional Advance LED light, blue LED, blue lens, w/flasher and cruise light, multivoltage, R65 Class 1 approved.	126,00
2010675CR	LD116 ADV	Directional Advance LED light, red LED, red lens, w/flasher and cruise light, multivoltage, R65 Class 1 approved.	126,00

Accessories

2010263	LD116-SB	Surface mounting kit, black colour	22,52
2010262	LD116-SC	Surface mounting kit, chrome colour	27,59
2010264	LD116-SWB	Swivel mounting kit, black colour	22,52

Optional Accessories

9022209		Wiring harness 3x0,75 (sold in meter, the length required has to be mentioned in the order)	8,09
8216090	SW-521	Switch 2 positions ON-OFF with key protector	16,40

QUADRAFLARE Advance

Federal Signal Vama introduces new, large **Quadraflare Advance** LED lights, specially designed for emergency vehicles, such as ambulance and fire fighting vehicles.

- HIGH INTENSITY

An ultimate technology LED lights and lenses provide efficient distribution of warning power. Quadraflare Advance offers maximum optical performance with minimal amperage draw.

- EVERY NEED SOLUTIONS

Available in blue, amber, red, white or green lights, multivoltage, R65 approved (Class 1 and Class 2) and with or without flasher (8 flashing modes).

- SYNCRONIZED

Quadraflare Advance without flasher could be synchronized with other Federal Signal Vama vehicle products (MLP, Intelli-Flash intermittent relays, ICS2000 Series intelligent controllers).

- APPROVED

Quadraflare Advance satisfy UN R65 and UN R10 approvals from United Nations Economic Commission for Europe. (UNECE). With IP protection IPX9K.



Voltage:	Multivoltage (10 - 30 V)
Average consumption:	1 Amp (12 V, fixed mode) 0.5 Amp (12 V, flash mode) 0.1 Amp (12 V & 24 V, cruise light mode)
LEDs colours:	Blue, amber, red, green, white
Lens colours:	Blue, amber, red, green, clear
Dimensions:	Light: 167 x 38 x 107 mm Mounting kit: 211 x 48 x 132 mm

- INCREASED SECURITY

New Negative Temperature Coefficient (NTC) regulates light intensity, avoiding heat disfunction on supplemental warning light.

REF.	MOD.	DESCRIPTION	EURO
Quadraflare Advance WITHOUT flasher			
2010617	Quadraflare Advance	Directional Advance LED light, blue LEDs, clear lens, w/o flasher, multivoltage. R65 Class 2 approved.	158,82
2010618	Quadraflare Advance	Directional Advance LED light, blue LEDs, blue lens, w/o flasher, multivoltage. R65 Class 2 approved.	158,82
2010619	Quadraflare Advance	Directional Advance LED light, amber LEDs, amber lens, w/o flasher, multivoltage. R65 Class 1 approved.	158,82
2010620	Quadraflare Advance	Directional Advance LED light, amber LEDs, clear lens, w/o flasher, multivoltage. R65 Class 1 approved.	158,82
2010623	Quadraflare Advance	Directional Advance LED light, red LEDs, red lens, w/o flasher, multi-voltage. R65 Class 2 approved.	158,82
2010624	Quadraflare Advance	Directional Advance LED light, red LEDs, clear lens, w/o flasher, multivoltage. R65 Class 2 approved.	158,82
2010461-01	Quadraflare Advance	Directional Advance LED light, white LEDs, clear lens, w/o flasher, multivoltage.	172,13
Installation Accessories for references without flasher			
2006035	MLP-F4	External flasher (4) lights, (8) flash patterns, multivoltage.	65,91
2006030	MLP-F8	External flasher (8) lights, (8) flash patterns, multivoltage.	82,39
Quadraflare Advance WITH flasher			
2010610	Quadraflare Advance	Directional Advance LED light, blue LEDs, blue lens, w/flasher, multi-voltage. R65 Class 2 approved.	188,80
2010609	Quadraflare Advance	Directional Advance LED light, blue LEDs, clear lens, w/flasher, multi-voltage. R65 Class 2 approved.	188,80
2010611	Quadraflare Advance	Directional Advance LED light, amber LEDs, amber lens, w/flasher, multi-voltage. R65 Class 1 approved.	188,80
2010612	Quadraflare Advance	Directional Advance LED light, amber LEDs, clear lens, w/flasher, multi-voltage. R65 Class 1 approved.	188,80
2010616	Quadraflare Advance	Directional Advance LED light, red LEDs, clear lens, w/flasher, multi-voltage. R65 Class 2 approved.	188,80
2010615	Quadraflare Advance	Directional Advance LED light, red LEDs, red lens, w/flasher, multi-voltage. R65 Class 2 approved.	188,80
2010607	Quadraflare Advance	Directional Advance LED light, white LEDs, clear lens, w/flasher, multi-voltage.	188,80
Installation Accessories			
QL64MC-01	Quadraflare	Surface mounting kit with chrome ring and gasket	23,23

Motorcycle Kit LD400 / LD410 Solaris and CO400 Solaris



Federal Signal Vama presents its new **LD400 and CO400** series, a priority warning LED kit for police motorcycles R-65 approved.

The **LD400 Solaris** consist on 1 front low profile light head which distribute the light beam at a horizontal angel of 120 degrees. The revolutionary reflector optical design provides a powerful lighting.

The light source of the **CO400 Solaris** telescopic pole is formed by the brand-new Solaris system.

- EASY MAINTAINANCE AND INSTALLATION

There is no need for an external power supply, and all necessary electrical connections are provided.

- WATERPROOF HOUSING AND CONNECTOR

IPX9K approved for LD400 LED lights.

- LIGHTNESS AND SHOCK RESISTANT

Thanks to its polycarbonate reflector and lenses and fiberglass support.

- LOW AMP DRAW AND LONG LIFE

LED technology assures long warning light life, and helps to reduce vehicle maintenance costs.



LD400



CO400 Solaris

	LD400	LD410	CO400 Solaris
Voltage:	12V	12V	12V
Average consumption in flashing mode:	blue: 0,25A amber and red: 0.25Amp	blue: 0.20Amp	blue and red: 1 Amp amber: 0.6 Amp
N° of LED diodes:	5 LEDs Solaris	4 LEDs Solaris 1 LED Solaris	Omnidirectional parabolic reflector with 15 LEDs
Weight:	220 g	220 g	1580 g (CO400) 1240 g (CO421)
Dimensions (without mounting brackets):	90 x 50 x 150 mm	90 x 50 x 150 mm	140 x 650 - 1515 mm (3-section pole) 140 x 550 - 760 mm (2-section pole)

REF.	MOD.	DESCRIPTION	EURO
LD400 - LD410 SOLARIS Front Light with flasher integrated			
2010630	LD400-D Solaris	Solaris LED directional light (right side), (5) LEDs, blue light, blue spreader lens, cruise light, swivel mount, 12V. UN R65 approv. Class 1	210,33
2010631	LD400-I Solaris	Solaris LED directional light (left side), (5) LEDs, blue light, blue spreader lens, cruise light, swivel mount, 12V. UN R65 approv. Class 1	210,33
2010644	LD400-D Solaris	Solaris LED directional light (right side), (5) LEDs, red light, red spreader lens, cruise light, swivel mount, 12V	210,33
2010645	LD400-I Solaris	Solaris LED directional light (left side), (5) LEDs, red light, red spreader lens, cruise light, swivel mount, 12V	210,33
2010642	LD400-D Solaris	Solaris LED directional light (right side), (5) LEDs, amber light, amber spreader lens, cruise light, swivel mount, 12V	210,33
2010643	LD400-I Solaris	Solaris LED directional light (left side), (5) LEDs, amber light, amber spreader lens, cruise light, swivel mount, 12V	210,33
2010632	LD410-D Solaris	Solaris LED directional light (right side), (4) LEDs blue light and (1) LED red light "Stop Light" function, spreader lens, swivel mount, 12V. UN R65 approved Class 1	210,33
2010633	LD410-I Solaris	Solaris LED directional light (left side), (4) LEDs blue light, spreader lens and (1) LED red light "Stop Light" function, spreader lens, swivel mount, 12V. UN R65 approved Class 1	210,33
CO400 SOLARIS Telescopic Mast with flasher integrated			
2005388	CO400 Solaris	Omnidirectional Solaris LED head, telescopic pole mount in (3) sections, (15) LEDs, blue light, blue spreader lens, cruise light, 12V. UN R65 approved	332,56
2005389	CO400 Solaris	Omnidirectional Solaris LED head, telescopic pole mount in (3) sections, (15) LEDs, amber light, amber spreader lens, cruise light, 12V. UN R65 approved	332,56
2005390	CO400 Solaris	Omnidirectional Solaris LED head, telescopic pole mount in (3) sections, (15) LEDs, red light, red spreader lens, cruise light, 12V. UN R65 approved	332,56
2005430	CO421 Solaris	Omnidirectional Solaris LED head, telescopic pole mount in (2) sections, (15) LEDs, blue light, blue spreader lens, cruise light, 12V. UN R65 approved	311,45
MC300 Series			
4004233-01	MC300	Motorcycle Control allows to control all the functions of lights and siren of the 400 Solaris Series: priority warning lights (LD400 Solaris and CO400 Solaris, "Stop Light" function, cruise light and continuous siren	49,35
4004352	MC300/A	Motorcycle Control allows to control all the functions of lights and siren of the 400 Solaris Series: priority warning lights (LD400 Solaris and CO400 Solaris, "Stop Light" function, cruise light, continuous siren and power limiter	62,27
Mount Accesories			
8216098	BA-6	Kit silent blocks telescopic pole, only available for poles in 3 sections.	102,81
82441524-03	LD400-CBLDO	Adapter wiring from LD350/LD360 to LD400/LD410	35,44
82441589	82441589	Motorbike wiring kit (LD410- CO400, SCS1000-D and control head)	303,14
82441588	82441588	Motorbike wiring kit (LD400- CO400, SCS1000-D and control head)	303,14

SIGNALMASTER SOLARIS



Federal Signal Vama presents the new ultra-low profile **SignalMaster Solaris** directional warning light. It offers an excellent results as an emergency light, thanks to its several flash patterns with different functions (day / night effect, fast / slow, scroll) to satisfy all needs. Its main features are:



- HIGH INTENSITY

The built-in Solaris technology onto SignalMaster directional warning light has exponentially increased light intensity compared to similar products on the market.

- EVERY NEED SOLUTIONS

SignalMaster Solaris has got 4 different flash patterns (right, left, centre-out sequences and middle-out flashing mode), and day / night*, slow / fast* and scroll function with a non-stop effect on a CAN BUS version.

- ULTRA-LOW PROFILE

Its low profile gives it less aerodynamic drag with less fuel consumption and better vehicle tire grip, for an increased security. Further more, it has an attractive design without losing any functionality and it allows easier installation in any vehicle.

- WATERPROOF HOUSING

Highly prepared to fight against most adverse weather conditions, thanks to its IP protection IPX9K.

* Features available on analogical version with ICS2009 multifunction controller.

Voltage:	10-30 V
Average consumption:	<u>0.3 Amps each LED modules (12V)</u> <u>10V 30V</u> SMLED 6/8: 2.6 Amp 1.3 Amp SMLED 6/8 KS: 2.6 Amp 1.3 Amp SMLED 8/11 CB: 1.8 Amp 1.3 Amp
Dimensions:	6-modules: 800 x 32 x 68 mm 8-modules: 1070 x 32 x 68 mm 8-CB modules: 800 x 32 x 68 mm 11-CB modules: 1070 x 32 x 68 mm
Weight:	6-modules: 705 g 8/11-modules: 940/995 g

SignalMaster GEN I



SignalMaster Solaris



Analogical and KS SignalMaster have fully interchangeable electrical connections for easy installation.

REF.	MOD.	DESCRIPTION	EURO
Analogical SignalMaster			
2010560	SMLED6 SL CT	Directional lighting system, (6) Solaris LED modules, roof connector, amber, multivoltage	408,00
2010561	SMLED8 SL CT	Directional lighting system, (8) Solaris LED modules, roof connector, amber, multivoltage	505,00
<u>Installation accesories</u>			
82441451		Analogical SMLED wiring, roof connector, 5M	53,00
82441445		Analogical SMLED wiring, roof connector, 10M	60,00
2010601	SMLED6 SL CM	Directional lighting system, (6) Solaris LED modules, 15M wiring harness included, amber, multivoltage (1)	360,00
2010602	SMLED8 SL CM	Directional lighting system, (8) Solaris LED modules, 15M wiring harness included, amber, multivoltage (1)	460,00
<u>Control Heads for analogical SignalMaster</u>			
ICS2009ST-12	ICS2009	Control system with 4 more outputs fully protected against polarity reversal, overloading and short-circuits, combined SignalMaster control (4, 6 or 8 lights), control head with 9 backlight keys included, 12/24V.	370,10
KS ECO SignalMaster			
2010646	SMLED6 -ECO SL	Directional lighting system, (6) Solaris LED modules, KS control head included, waterproof connector, amber, bitension	389,50
2010647	SMLED8 -ECO SL	Directional lighting system, (8) Solaris LED modules, KS control head included, waterproof connector, amber, bitension	461,25
KS SignalMaster			
2010562	SMLED6-KS CM	Directional lighting system, (6) Solaris LED modules, KS control head, 20cm wiring harness included, waterproof connector, amber, bitension	607,50
2010563	SMLED8-KS CM	Directional lighting system, (8) Solaris LED modules, KS control head, 20cm wiring harness included, waterproof connector, amber, bitension	711,00
<u>Installation accesories</u>			
82441446		SMLED KS/CB wiring, wiring harness, 5M	21,88
82441447		SMLED KS/CB wiring, wiring harness, 10M	31,00
82441476		SMLED KS/CB wiring, wiring harness, 15M	40,95
2010568	SMLED6-KS CT	Directional lighting system, (6) Solaris LED modules, KS control head, roof connector, amber, bitension	688,50
2010569	SMLED8-KS CT	Directional lighting system, (8) Solaris LED modules, KS control head, roof connector, amber, bitension	792,00
<u>Installation accesories</u>			
82441453		SMLED KS wiring, roof connector, 10M	53,00
CANBUS SignalMaster (2)			
2010564	SMLED8-CB SL	Directional lighting system, (8) continuous LED mode, CAN BUS, amber, multivoltage	720,00
2010565	SMLED11-CB SL	Directional lighting system, (11) continuous LED mode, CAN BUS, amber, multivoltage	835,00
<u>Installation accesories</u>			
82441446		SMLED KS/CB wiring, wiring harness, 5M	21,88
82441447		SMLED KS/CB wiring, wiring harness, 10M	31,00
82441476		SMLED KS/CB wiring, wiring harness, 15M	40,95

(1) Without waterproof connector.

(2) CANBUS SignalMaster must be controlled with a CANBUS control head BCT2000 or BCT500CB.

Accesory

8234188	Kit Silent Blocks SMLED SL Solaris	71,91
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NOTE: All the models must be acquired by its correspondent wiring connection (except 2010601 and 2010602 references).



Road Safety Arrow Foldable LED panel

Federal Signal Vama presents **Road Safety Arrow**, a foldable LEDs panel, high-tech, great lighting and designed to provide big visibility, even in fast roads, with vehicles getting closer at a high speed.

Due to its excellent LED light lighting, Road Safety Arrow range has been designed both to help to control traffic when the emergency vehicle is parked, and also when the situation requires to alert and manage traffic from long distances.

- EASY INSTALLATION

All models have a roof standard connector and CANBUS technology, which minimizes vehicle installation.

- FAST PANEL OPENING AND CLOSING SYSTEM

Fast opening/closing system, lasting just 25 seconds to be completely opened / closed.

- SIGNALMASTER

When approaching at operation or at emergency zone, a Signalmaster function reinforces security around perimeter vehicle, adding an excellent light coverage to the LED panel.

- ALERT SOUND SYSTEM WHEN OPENING AND CLOSING THE PANEL

To alert the worker from any panel movement, avoiding risks and increasing security.

- VEHICLE BATTERY CONTROL SYSTEM

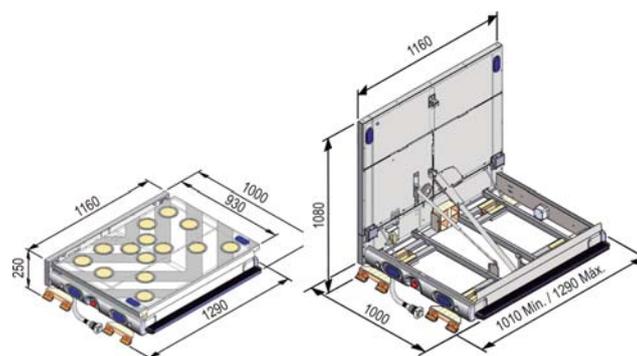
It exists 3 battery states. In the last state, a short whistling sound is emitted every 30 seconds, to warn about the low battery level available.

- EMERGENCY SYSTEM TO OPEN/CLOSE THE PANEL

It incorporates 2 emergency opening / closing buttons, in case the panel should be suddenly interrupted. If necessary it also provides a manual opening system.

- MODERN AND ERGONOMIC DESIGN

Its high quality workmanship and appearance, together with the simetric lights and Microled Advance arrangement, makes Road Safety Road have an attractive design and assures that can be seen efficiently both during the day and at night.



Road Safety Arrow dimensions in mm.

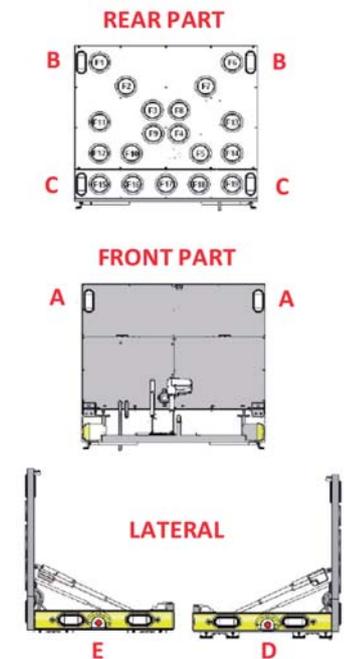
- EXCEPTIONAL LIGHTING

As Road Safety Arrow is compound of 19 lights made of 21 LED lights + 10 Microled Advance along the panel, is one of the most illuminated arrow warning systems that currently exists in the market, clearly magnifying the vehicle's presence (up to 3 Km distance), and therefore, increases security and reduces risk.

Power Supply:	12V
Operating temperature:	-20°C to 50°C
Maximum opening / closing current:	8.7 Amp. / 5.7 AMP.
Maximum current with all the lights ON (Cross+all blue lights + Signalmaster solaris):	7.5 Amp
Colour of perimetral lights:	Blue or amber
Colour of arrow lights:	Amber
Colour of reflective stripes:	white - red, white - blue or red - yellow
Foldable panel, opening duration time:	25 seg.
Foldable panel, closing duration time:	25 seg.
Weight:	64 kg without brackets 77,2 Kg with brackets

ROAD SAFETY ARROW PRESELECTED MODELS:

ROAD SAFETY ARROW references:	INTEGRATED IN ROAD SAFETY ARROW					OPTIONAL	
	FOLDABLE PANEL		PANEL BASE			PANEL	PANEL BASE
	Right and left arrow, cross	2 vertical Microleds in front part (A)	2 vertical Microleds in rear part (B)	2 vertical Microleds in rear part (C)	4 horizontal Microleds in lateral part (D)	Reflective stripes in rear part	LED Solaris 11SL CB Signalmaster in front part
2025489-02	●	●	●	●	●	----	----
2025489-02-SM	●	●	●	●	●	----	●
2025489-01	●	●	●	●	●	----	----
2025489-01-SM	●	●	●	●	●	----	●
2025489BW-02	●	●	●	●	●	● ○	----
2025489BW-02-SM	●	●	●	●	●	● ○	●
2025489BW-01	●	●	●	●	●	● ○	----
2025489BW-01-SM	●	●	●	●	●	● ○	●
2025489RW-02	●	●	●	●	●	● ○	----
2025489RW-02-SM	●	●	●	●	●	● ○	●
2025489RW-01	●	●	●	●	●	● ○	----
2025489RW-01-SM	●	●	●	●	●	● ○	●
2025489RY-01-SM	●	●	●	●	●	● ●	●



REF.	MOD.	DESCRIPTION	EURO
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Preselected Models

2025489-02	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights.	8.306,09
2025489-02-SM	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights. With 11 LEDs CANBUS Signalmaster.	8.982,44
2025489-01	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights.	8.306,09
2025489-01-SM	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With 11 blue LEDs CANBUS Signalmaster.	8.982,44
2025489BW-02	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights. With rear blue/white reflective stripes.	9.090,91
2025489BW-02-SM	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights. With 11 LEDs CANBUS Signalmaster. With rear blue/white reflective stripes	9.767,26
2025489BW-01	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With rear blue/white reflective stripes	9.090,91
2025489BW-01-SM	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With 11 blue LEDs CANBUS Signalmaster. With blue/white reflective stripes	9.767,26
2025489RW-02	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights. With rear red/white reflective stripes.	9.090,91
2025489RW-02-SM	RSA- Foldable panel with amber arrow and cross LED lights, amber front and rear directional LED lights, amber lateral directional LED lights. With 11 LEDs CANBUS Signalmaster. With rear red/white reflective stripes	9.767,26
2025489RW-01	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With rear red/white reflective stripes	9.090,91
2025489RW-01-SM	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With 11 blue LEDs CANBUS Signalmaster. With red/white reflective stripes	9.767,26
2025489RY-01-SM	RSA- Foldable panel with amber arrow and cross LED lights, blue front and rear directional LED lights, blue lateral directional LED lights. With 11 blue LEDs CANBUS Signalmaster. With red/yellow reflective stripes	9.767,26

Control Head

BCT2009-SA01	BCT2000 Series control head, 9 control keys.	142,12
8216160SA01	BCT500CB Series, 13 control keys, (with public address)	344,88

Permanent mounting kit

8234192	RSA Permanent mounting kit	404,64
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FSX Sun visor

Federal Signal Vama's **FSX sun visor** provides clear identification for emergency services and highly visible temporary marking for vehicles. Used extensively by various emergency services including Police, Fire, Search and Rescue, Ambulances and Doctors. The **FSX sun visor** is perfect for marking any emergency vehicle that may be out of service, just out on test or for unmarked police cars working within an emergency or rescue service. This sign is discreet and remains unseen when not in use but highly effective when required.

- ANTI-DAZZLE FEATURE

Light output dimming control to avoid emergency officers dazzle inside emergency vehicle.

- EASY INSTALLATION AND USE

Simply slides over existing vehicle's sun-visor and plug it to the cigarette plug.

- NO FIXING BRACKETS OR STICKING

It can be attached to your normal car visor easily without the need for any special tools, permanent brackets or sticking materials.

- EASY REMOVAL AND STORAGE WHEN NOT IN USE

When not in use, simply fold away your vehicle's visor so it is out of sight or if preferred, simply slide off your visor and keep it inside the glove box.

- FLEXIBILITY

Wide selection of texts available. Please consult our sales people and we will see if we can assist you.

- RUGGERISED

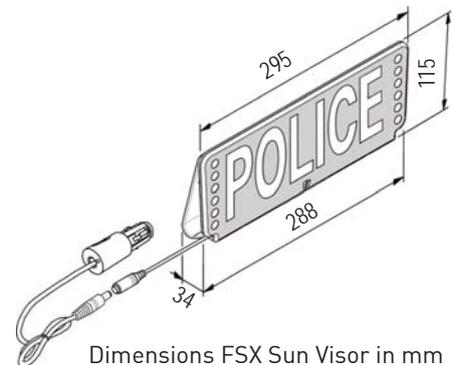
UV stable and shatterproof.

- PATENTED

Approved according to European Utility Patent approval.



High-visibility blue warning lights



Dimensions FSX Sun Visor in mm



REF.	MOD.	DESCRIPTION	EURO
2030001		FSX sun visor, with (2) blue LED warning lights, with "POLICIA" sign, cigarette plug, 12V/24V	229,00
2030011		FSX sun visor, with (2) blue LED warning lights, with "POLICE" sign, cigarette plug, 12V/24V	229,00
2030012		FSX sun visor, with (2) blue/red LED warning lights, with "POLICE" sign, cigarette plug, 12V/24V	229,00
2030005		FSX sun visor, with (2) amber LED warning lights, with "BOMBEROS" sign, cigarette plug, 12V/24V	229,00
2030023		FSX sun visor, with (2) red LED warning lights, with "FIRE" sign, cigarette plug, 12V/24V	229,00

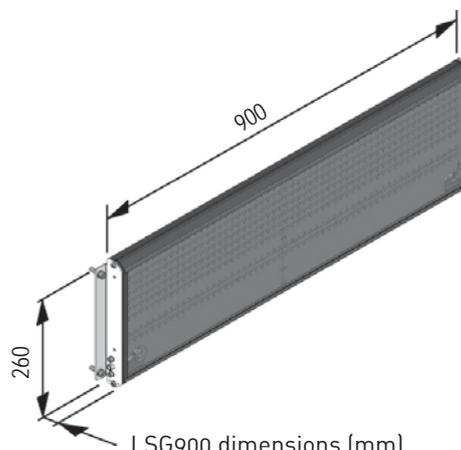
(*) For other texts please consult with our sales network. Minimum order 10 units.

LSG900 Series

The **LSG900** sign is a programmable LED sign, for up to 200 fully programmable messages. The message length is up to eight lines of ten characters. This new LED sign has a SignalMaster integrated in the lower level.

The sign is controlled through the LCD900 control head, with LCD screen and keys of silicone. It allows, through a simple menu system, select and preview the message before it appears on the LED sign.

With Smartsign Message Editor software you can edit and download 200 messages to the control head. Allows programming of letters, numbers and symbols (arrow, filled square, etc.). It also has an extensive library of most common messages in different countries.



LSG900 dimensions (mm).

Voltage:	12 V
Number of programmable messages:	200
Number of lines by message:	8
Number of characters in display:	10
Character size:	125 x 85 mm
Matrix size:	21 x 15 LEDs
LED colour:	red / amber
LED:	SMD
Radiation angle:	+15°
Dimensions:	LED Sign: 900 x 260 x40 mm Control head: 200 x 60 x33 mm
Weight:	Led Sign: 4 Kg Control head: 250 gr

REF.	MOD.	DESCRIPTION	EURO
LSG900			
2025446	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages, Red LEDs and Signalmaster function.	990,13
2025486SE	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages, Amber LEDs.	990,13
2025519	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages, Amber LEDs and Signalmaster function.	990,13
8216136-01	LCD900	Control head w/ LCD back-lit screen to display messages for LCD900, 200 Programmable messages.	192,70
2025336	SSME	SmartSign Message Editor, for editing and downloading SmartSign programmable LED sign messages from PC.	187,05
SWEDISH CHARACTERS LSG900			
2025507-01	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages, Amber LEDs and Signalmaster function. SWEDISH CHARACTERS	990,13
2025508-01	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages, Amber LEDs . SWEDISH CHARACTERS	990,13
2025509-01	LSG900	LSG900 LED sign for external mounting. Waterproof housing. Vertical mounting system, 200 Programmable messages , Red LEDs and Signalmaster function. SWEDISH CHARACTERS	990,13
2025509-02	LSG900	LSG900 LED sign for external mounting. Vertical mounting system, 200 Programmable messages, Red LEDs. SWEDISH CHARACTERS	990,13
BCT3009-03	BCT3009-03	Control head w/ LCD back-lit screen to display messages for SWEDISH CHARACTERS LCD900, 200 Programmable messages.	291,10
2025473	S2ME	SmartSign Message Editor 2, for editing and downloading SmartSign programmable LED sign messages from PC.	104,88
Accesory			
8234178		Silent block kit for LSG900	99,99

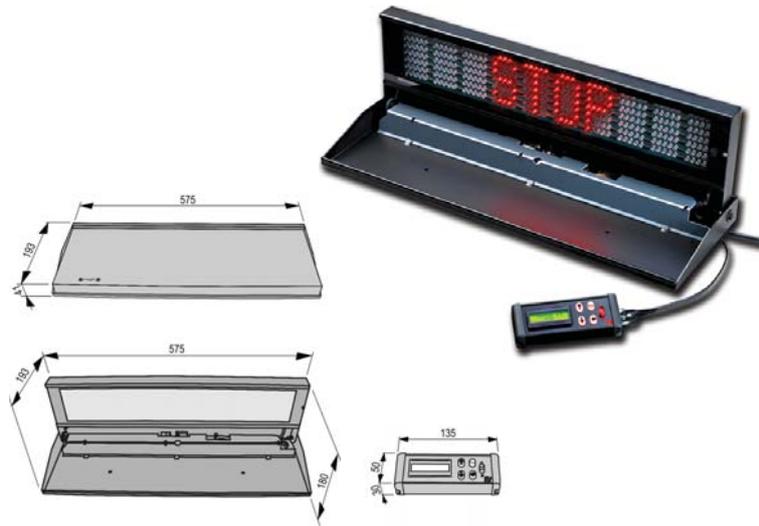
SMARTSIGN

The **LSG700** sign is a foldable and programmable LED sign, with capacity for 200 totally programmable messages. The length of messages is up to eight lines with ten characters.

LSG702 has got the same electronic features, but with a fixed vertical mounting system through 2 "L" brackets and 2 suction cups for glass adjustment.

Both signs, are controlled through the **LCD700**, with LCD screen and selection buttons. It allows, through a simple menu system, to select and preview the message before it appears on the LED sign.

Through the SmartSign Message Editor PC software, it is easy to edit and unload the 200 messages to the control head. It allows to program letters, numbers and symbols (arrows, square, etc.). In addition, it has a wide library of the most usual messages in different countries.

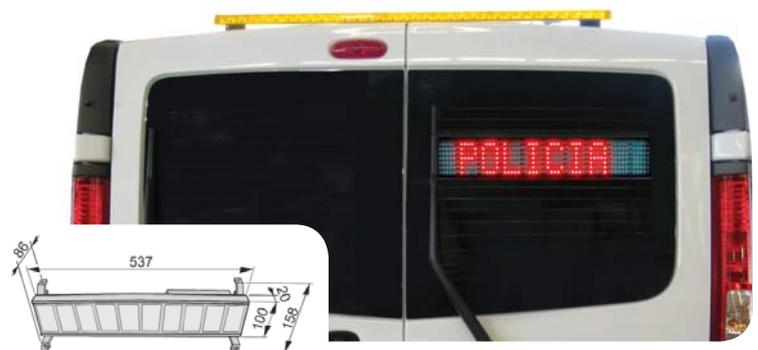


Smartsign dimensions (mm)



Integrated Smartsign option in a Phoenix lightbar

Voltage:	12 V
Number of programmable messages:	200
Number of lines by message:	8
Number of characters in display:	10
Character size:	75 x 44 mm
Matrix size:	7 x 5 LEDs
LED colour:	red
LED diameter:	5 mm
Radiation angle:	15°
Dimensions:	Screen size: 506 x 86 mm Control head: 50 x 12 mm
Weight:	Sign: 2850 g Control head: 140 g



Back door LSG702 Sign vehicle

REF.	MOD.	DESCRIPTION	EURO
2025310	LSG700	(1) Programmable LED sign, 575x195x185 mm, in metal flip up undercover case. 200 Programmable messages by SmartSign Message Editor. LCD700 Control head w/ LCD back-lit screen to display messages. **(SmartSign Message Editor and LCD700 control head purchased separately)	879,12
2025377	LSG702	(1) Programmable LED sign, 575x195x185 mm, fixed mountig kit with (2) "L" brackets in the upper level and (2) suction pad in the lower level, 200 Programmable messages by SmartSign message Editor, LCD700 control head w/LCD back-lit screen to display messages	793,96
8216112XXX	LCD700	LCD700 Control head w/ LCD back-lit screen to display messages. (Please specify control head language when ordering)	177,06
2025336	SSME	SmartSign Message Editor, for editing and downloading SmartSign programmable LED sign messages from PC.	187,05

INTERNAL WARNING LIGHTS

➤ **Internal lights.....68**



NANOLED VIPER

Federal Signal Vama presents the **NanoLED VIPER**, the new internal warning LED lights, with a more compact and renewed design. It is the ideal solution for camouflaged vehicles or reinforce the lighting on emergency vehicles, increasing the efficiency of emergency signaling, when combined with the lightbars.

The **NanoLED VIPER** incorporate 6 LED lights (SINGLE version) or 12 LED lights (DUAL version), providing higher light intensity and improving energy efficiency. Its range includes single color and dual color lights, as well as R65 class 1 and class 2 models.

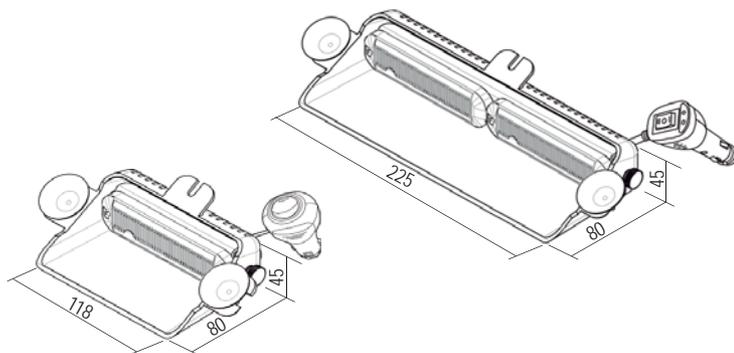


NanoLED Viper SINGLE



NanoLED Viper DUAL

	SINGLE	DUAL
Voltage:	10-30V	10-30V
Consumption (Flash pattern):	0,75 A (12V) 0,45 A (24V)	0,75 A (12V) 0,45 A (24V)
Operating temperature:	-40°C to 80°C	-40°C to 80°C
Dimensions:	80 x 45 x 118 mm	80 x 45 x 225 mm
Weight:	CL1: 226 gr CL2: 250 gr	CL1: 323 gr CL2: 362 gr
Flash pattern:	7 (single colour) 16 (dual colour)	7



NanoLED Viper SINGLE & DUAL dimensions in mm.

AVAILABLE COLOURS



REF.	MOD.	DESCRIPTION	EURO
NanoLED VIPER SINGLE			
	2010770	NanoLED VIPER SINGLE, blue LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 1 approved.	220,00
	2010771	NanoLED VIPER SINGLE, amber LED, class 1, clear lens, cigarette plug, 10-30V. UN R65 class 1 approved.	220,00
	2010772	NanoLED VIPER SINGLE, red LED, with flasher, clear lens, cigarette plug, 10-30V. UN R65 class 1 approved.	220,00
	2010773	NanoLED VIPER SINGLE, blue LED, with flasher, clear lens, cigarette plug, 10-30V. UN R65 class 2 approved.	226,00
	2010774	NanoLED VIPER SINGLE, amber LED, with flasher, clear lens, cigarette plug, 10-30V. UN R65 class 2 approved.	226,00
	2010775	NanoLED VIPER SINGLE, red LED, with flasher, clear lens, cigarette plug, 10-30V. UN R65 class 2 approved.	226,00
	2010776	NanoLED VIPER SINGLE, blue-red LED, with flasher, clear lens, cigarette plug, 10-30V. Class 1.	220,00
	2010777	NanoLED VIPER SINGLE, blue-amber LED, with flasher, clear lens, cigarette plug, 10-30V. Class 1.	220,00
	2010778	NanoLED VIPER SINGLE, blue-white LED, with flasher, clear lens, cigarette plug, 10-30V. Class 1.	220,00
	2010779	NanoLED VIPER SINGLE, amber-red LED, with flasher, clear lens, cigarette plug, 10-30V. Class 1.	220,00
NanoLED VIPER DUAL			
	2010780	NanoLED VIPER DUAL, blue-blue LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 1 approved.	430,00
	2010781	NanoLED VIPER DUAL, amber-amber LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 1 approved.	430,00
	2010782	NanoLED VIPER DUAL, red-red LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 1 approved.	430,00
	2010783	NanoLED VIPER DUAL, blue-blue LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 2 approved.	440,00
	2010784	NanoLED VIPER DUAL, amber-amber LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 2 approved.	440,00
	2010785	NanoLED VIPER DUAL, red-red LED, clear lens, with flasher, cigarette plug, 10-30V. UN R65 class 2 approved.	440,00
	2010786	NanoLED VIPER DUAL, blue-red LED, clear lens, with flasher, cigarette plug, 10-30V. Class 1.	430,00
	2010787	NanoLED VIPER DUAL, blue-amber LED, clear lens, with flasher, cigarette plug, 10-30V. Class 1.	430,00
	2010788	NanoLED VIPER DUAL, blue-white LED, clear lens, with flasher, cigarette plug, 10-30V. Class 1.	430,00
	2010789	NanoLED VIPER DUAL, amber-red LED, clear lens, cigarette plug, 10-30V. Class 1.	430,00
	2010790	NanoLED VIPER DUAL, blue-red LED, clear lens, with flasher, cigarette plug, 10-30V. Class 2.	440,00
	2010791	NanoLED VIPER DUAL, blue-amber LED, clear lens, with flasher, cigarette plug, 10-30V. Class 2.	440,00
	2010792	NanoLED VIPER DUAL, blue-white LED, clear lens, with flasher, cigarette plug, 10-30V. Class 2.	440,00
	2010793	NanoLED VIPER DUAL, amber-red LED, clear lens, with flasher, cigarette plug, 10-30V. Class 2.	440,00



AREA LIGHTING

- **Search lights.....72**
- **Scene lights.....73**
- **Worklights.....75**



VISIBEAM Series

Search light with remote control and high focusing precision. It may be adjusted vertically, 35° below and 105° above the horizontal plane and has a 360° rotation option.

- **Visibeam** includes a remote control unit which is compact and easy to use. It is connected to the light via a telephone type cable. An indicator light on the control reminds the user that the spotlight is on.

- **The Wireless Visibeam** is a combination of wireless remote control and powerful halogen searchlight. The ergonomically designed controller operates at over 30 m and fits comfortably in the palm of the hand. It includes a belt clip for easy storage on an operator's belt or vehicle's sun visor.



VISIBEAM



VISIBEAM WIRELESS

VISIBEAM

Voltage:	12 or 24 V
Average consumption:	55W: 4.2 Amp 65W (24 V): 2.7 Amp 100W: 7.8 Amp
Candelas:	55W: 80000 65W: 90000 100W: 125000
Dimensions:	165 x 165 x 165 mm
Weight:	900g

VISIBEAM WIRELESS

Voltage:	12 or 24 V
Average consumption:	100W: 7.8 Amp 65W (24 V): 2.7 Amp
Candelas:	65W: 90000 100W: 125000
Dimensions:	Permanent mount: 165 x 165 x 165 mm Magnetic mount: 165 x 165 x 175 mm
Weight:	900g

REF.	MOD.	DESCRIPTION	EURO
WIRELESS VISIBEAM® SEARCH LIGHT			
620200A	VB12PM-W	100W Spotlight, wireless control head, permanent mount, 12V	559,84
620201A	VB12MG-W	100W Spotlight, wireless control head, magnetic mount, 12V	591,07
620202A	VB24PM-W	65W Spotlight, wireless control head, permanent mount, 24V	557,98
VISIBEAM®, SEARCH LIGHT			
2101081A	620102	55W Spotlight, remote control head, permanent mount, 12V	476,89
2101089A	620104	65W Spotlight, remote control head, permanent mount, 24V	491,56
2101082A	620122	100W Spotlight, remote control head, permanent mount, 12V	495,72

LINELED

Federal Signal Vama presents the new **LineLED** Scene light, composed by 6/12/24 very high efficiency LEDs and has been specially developed for surface mount. Its design allows covering 120° light angle and enables an easy installation at vehicle's body, turning LineLED into an excellent worklight.

With an anodized aluminum body and ABS finishing, this light become a lighter and strong model, with IP protection against dust and water.

- HIGH INTENSITY

The high lighting efficiency of the optical system and LED diodes, provides LineLED Series with a 500/1000/2000 Lumens powerful light intensity.

- EASY INSTALLATION

Straightforward and easy installation thanks to its surface mounting.

- LONG OPERATIONAL LIFE

LED technology guarantees long operational life reducing maintenance costs.

- WATER AND DUST PROTECTION

IP67 direct lighting and IP65 diffused lighting approved.

- WIDE ANGLE

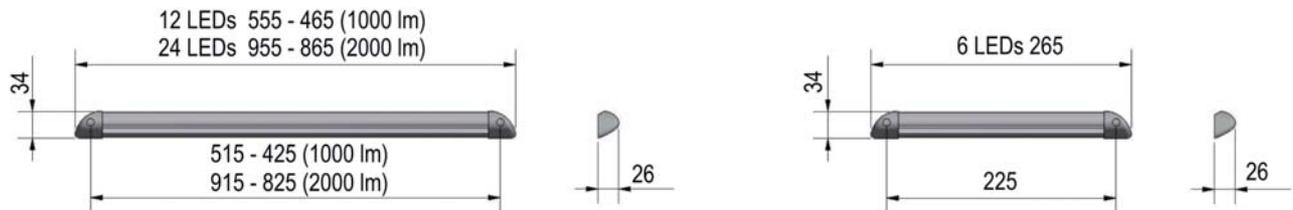
Its wide light output angle (120°) ensures lighting in a wide working area.

- EVERY NEED SOLUTIONS

Available with direct or diffused beam, according to end user needs.



	24 LEDs	12 LEDs	6 LEDs
INTENSITY LIGHT OUTPUT	2000 lm	1000 lm	500 lm
Power:	26W	13W	6,5W
Operating voltage:	12/24V	12/24V	12/24V
Current draw:	12V = 1,86A 24V = 0,93A	12V = 0,93A 24V = 0,47A	12V = 0,47A 24V = 0,24A
Operating temperature:	-30° -+ 40°	-30° -+ 40°	-30° -+ 40°
LED angle beam:	120°	120°	120°
Life time at 85°:	50.000 hours	50.000 hours	50.000 hours
LEDs Colours:	White	White	White
Connection:	Cable	Cable	Cable
Weight: ref. 2101158A	-	-	102,5 gr
Weight: ref. 2101159A	-	-	115 gr
Weight: ref. 2101160A	-	177,5 gr	-
Weight: ref. 2101161A	-	190 gr	-
Weight: ref. 2101167A	360 gr	-	-
Weight: ref. 2101164A	370 gr	-	-



Dimensions LineLED in mm.

REF.	MOD.	DESCRIPTION	EURO
2101158A	LineLed	Scene light with 6 high intensity LEDs, 265 x 34 x 26 mm, surface mount with flat base. Direct lighting, IP67. 120° angle. Bitension 12/24V	55,65
2101159A	LineLed	Scene light with 6 high intensity LEDs, 265 x 34 x 26 mm, surface mount with flat base. Diffused lighting, IP65. 120° angle. Bitension 12/24V	55,65
2101160A	LineLed	Scene light with 12 high intensity LEDs, 465 x 34 x 26 mm, surface mount with flat base. Direct lighting, IP67. 120° angle. Bitension 12/24V	91,00
2101161A	LineLed	Scene light with 12 high intensity LEDs, 555 x 34 x 26 mm, surface mount with flat base. Diffused lighting, IP65. 120° angle. Bitension 12/24V	91,00
2101167A	LineLed	Scene light with 24 high intensity LEDs, 865 x 34 x 26 mm, surface mount with flat base. Direct lighting, IP67. 120° angle. Bitension 12/24V.	169,00
2101164A	LineLed	Scene light with 24 high intensity LEDs, 955 x 34 x 26 mm, surface mount with flat base. Diffused lighting, IP65. 120° angle. Bitension 12/24V.	169,00

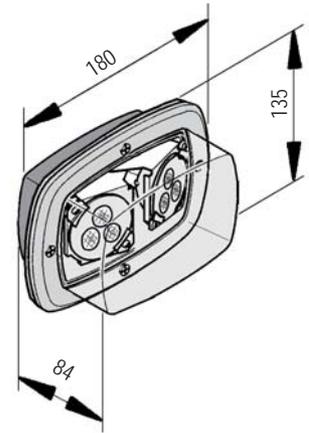
LED FD340/LD GHSCENE

LEDs light for Scene lighting equipped with two 3W LED lamps adjustable horizontally and vertically.

Flush mounting system for greater integration into the vehicle.

LED GHScene includes a chrome trim.

Available in 12V and 24V.



LED FD340/LD GHSCENE dimensions (mm).

Voltage:	12 or 24 V
Average consumption:	0.5 Amp (12V)
Power:	2 x 3W
Dimensions:	135 x 180 x 84 mm
Weight:	533 g

REF.	MOD.	DESCRIPTION	EURO
2005445	GHSCENE LED	Rectangular directional Scene LED light, 180 x 135mm, (2) 3W LED lamps, flush mount, chrome flange, clear, 12V	158,76
2005446	GHSCENE-24 LED	Rectangular directional Scene LED light, 180 x 135mm, (2) 3W LED lamps, flush mount, chrome flange, clear, 24V	158,76

LEDS Worklights

Federal Signal Vama LED worklights are specially designed for Heavy Duty applications (heavy vehicles, platforms, excavators, tractors, etc.), and can be installed on all types of vehicles. Additionally, its special focus design creates **an excellent light distribution** to operate whether on close (flood light or wide (spot light) areas. Furthermore, thanks to die-cast aluminum housing with polycarbonate lens and stainless steel mounting hardware, these worklights are shock resistant and are prepared for working in a high-vibration environments.



Flood permanent light



Spot permanent light

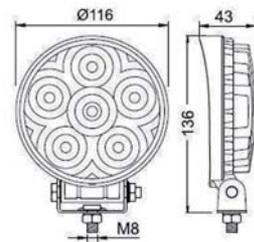
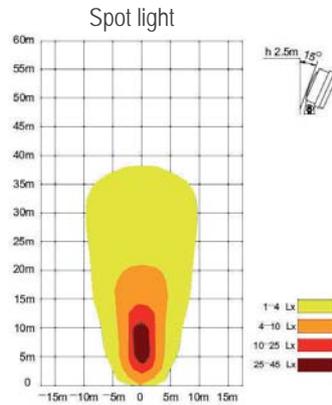
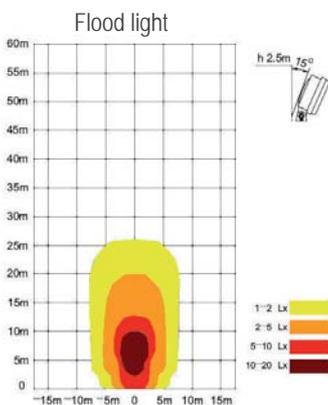


Flood magnetic light

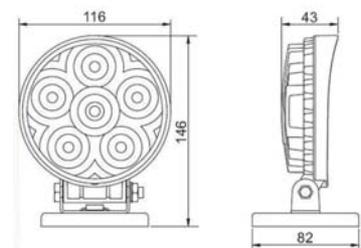


Spot magnetic

Voltage:	10-30V
Amperage:	1.00Amp (12V) / 0.5Amp (24V)
Power:	18W
Light output:	1350 Lumens
Viewing angle:	120° (flood light), 30° (spot light)
Certifications:	IP67 against dust and water



Permanent light dimensions (mm)



Magnetic light dimensions (mm)

REF.	MOD.	DESCRIPTION	EURO
Led Work lights, permanent mount			
2010639A		Round worklight, LED, flood, permanent mount, multivoltage	78,80
2010659A		Round worklight, LED, spot, permanent mount, multivoltage	78,80
Led Work lights, magnetic mount			
2010638A		Round worklight, LED, flood, magnetic mount, multivoltage	86,15
2010660A		Round worklight, LED, spot, magnetic mount, multivoltage	86,15

* All references above have 1 year warranty minimum (parts & labour). For more information, please refer to the price list (Sales conditions-Limited warranty) or contact our sales department.

** Magnetic mounting models produced for a temporary use on the roof of the vehicle.



LineLED scene lights

SIRENS & AUDIBLE WARNING

- **Integrated control systems.....78**
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ICS2010

ICS2010 is an integrated control system incorporating GEP500, an electronic power management system, and a control head BCT500.

Enables control of all acoustic and luminous emergency signalling devices on the vehicle from a single console (10 relays for light control), including SignalMaster directional warning lights.

All connectors to the GEP500 electronic manager incorporate a LED status lamp with easy-to-replace protective fuses.

One novelty available with the BCT500 control head is a high-speed recording function which makes it possible to load different operating programs. Comes with illuminated silicon keypad and for large fleets special character sets can be supplied.



BCT500:

Voltage:	12 V
Keypad:	Silicone with conductive tracks
Number of keys:	13
Keypad lighting:	LED backlighting
Communication bus:	RS485
Dimensions:	150 x 43 x 35 mm
Weight:	140 g

GEP500:

Voltage:	12 V
Output power speaker:	100 W (1 speaker with 11 ohm)
Output relays:	10 x 10 Amp
Auxiliary function:	1 x 0.75 Amp (Tachograph optional)
SignalMaster Control:	6-modules: 6 x 2.5 Amp 8-modules: 8 x 2.5 Amp
Dimensions:	60 x 140 x 190 mm
Weight:	1800 g

REF.	MOD.	DESCRIPTION	EURO
<i>ICS2010 integrated control system includes:</i>			
2020192	GEP500	Electronic power management. Integrate the systems for the control of the luminous and acoustic devices of emergency. 100W sirena amplifier s/16 programs, porgramable, SignalMaster controller, 10 relays	582,33
8216103	BCT500-STD	Control head. Enables the control of all functions assigned to the GEP500 through 13 backlit keys, PTT for public address and volume control. Standard model: wail, yelp and hi-lo. *Other models, please contact with Sales Dpt.	422,63

ASX Series

Federal Signal Vama presents one of the most compact sirens in the market, regarding its weight and dimensions, **ASX series**, which it also produces a clean and powerful sound. It meets R10 European Regulation, it is bitension, protected against water and dust and due to its different models, ASX is a product highly adaptable to any market need.

Wide product range available for every need, following different countries and application regulations. Consult at the end of this document the different models available.

- COMPACT

Due to the siren reduced dimensions, it can be installed in all type of police, fire and ambulance vehicles.

- EASY TO INSTALL

ASX series installation only requires one cable, which is already provided with waterproof connectors. Therefore, its installation is very simple.

- HERMETIC, WATERPROOF AND DUST RESISTANT

Both the siren and the speaker are prepared to be placed in any position regardless of weather conditions. Siren has IP66 and IP69K protection grade, speaker has IP66 and connector has IP67.

- SOLUTION FOR ANY MARKET NEED

Thanks to the different siren available models according to both its technology and tones, plus the 2 different wiring sizes, ASX Series is suitable for all markets and needs.

- HIGH EFFICIENCY

Especially designed to operate at a constant temperature, made to avoid overheating.



- NEODYMIUM MOTOR

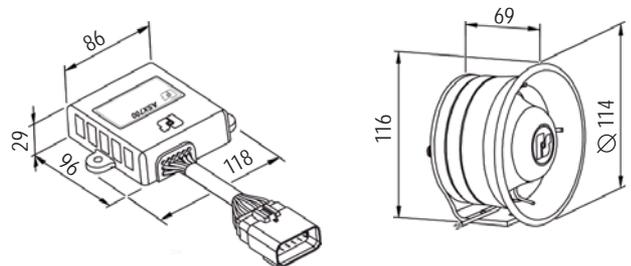
The speaker has a Neodymium motor, which offers higher acoustic pressure (117 dB) than other market products. This increases siren product life and raises its efficiency.

- IMPACT-RESISTANT CASE

Its structure is made of polycarbonate and it is reinforced with UV protection, achieving to dispel the heat and avoid color loss due to the long sun exposures.

- EUROPEAN REGULATION COMPLIANCE

The siren meets R10 European Regulation.



Siren and speaker dimensions in mm.

Siren

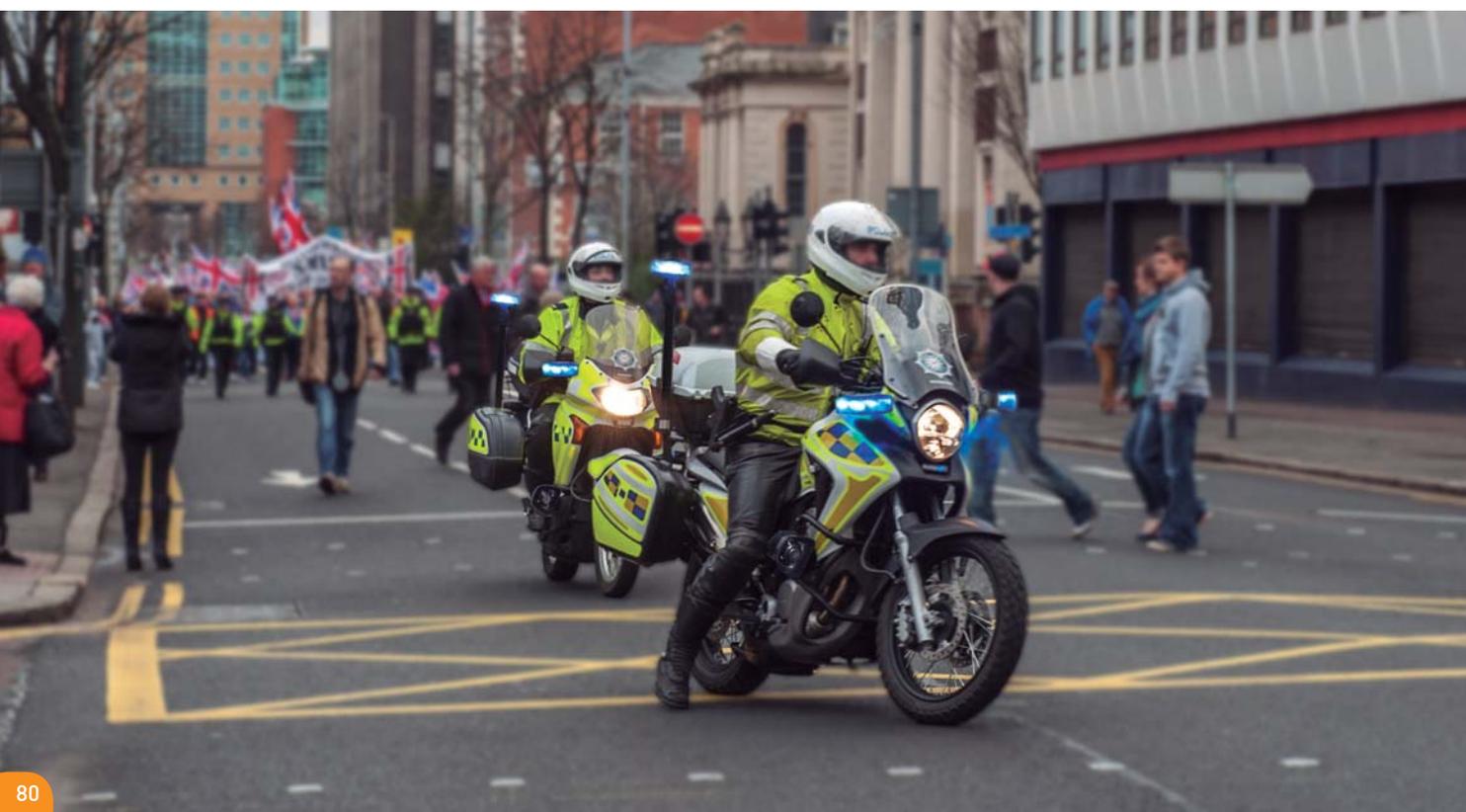
Voltage:	10 – 30V
Output power:	140 W (max.)
Auxiliary lights output:	1 x 5 A
Auxiliary output:	1 x 1 A
Frequency and tone:	According to selected tone
Dimensions:	96 mm x 29 mm x 86 mm
Weight:	450 gr
Operating temperature:	-30°C to 65°C

Speaker

Coil impedance:	4 Ohms
Maximum output power:	70W
Acoustic pressure (dB) at 2m:	1 speaker: 117 dB 2 speakers: 120 dB
Operating temperature:	-20°C to 50°C
Dimensions:	116 mm x 69 mm x 114 mm diameter
Weight:	1.080 gr

REF.	MOD.	DESCRIPTION	EURO
Sirens without public address			
2020286	ASX700	70 W Siren amplifier, analogic system, day / night function, claxon, without auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone (WAIL, YELP, BITONAL)	313,81
2020286AH	ASX700	70 W Siren amplifier, analogic system, day / night function, claxon, without auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone - Airhorn	313,81
2020287	ASX710	70 W Siren amplifier, analogic system, day / night function, claxon, (2) auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone (WAIL, YELP, BITONAL)	368,82
2020287AH	ASX710	70 W Siren amplifier, analogic system, day / night function, claxon, (2) auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone - Airhorn	368,82
2020288	ASX800	70 W Siren amplifier, CANBUS system, day / night function, claxon, without auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone (WAIL, YELP, BITONAL)	313,81
2020288AH	ASX800	70 W Siren amplifier, CANBUS system, day / night function, claxon, without auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone - Airhorn	313,81
2020289	ASX810	70 W Siren amplifier, CANBUS system, day / night function, claxon, (2) auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone (WAIL, YELP, BITONAL)	368,82
2020289AH	ASX810	70 W Siren amplifier, CANBUS system, day / night function, claxon, (2) auxiliary outputs, waterproof connectors, mutivoltage 10- 30V.Standard tone - Airhorn	368,82
Mount Accesories			
82441700	ASX700 - 800 - 810	1 Meter wiring, waterproof connectors, for ASX700, ASX800 and ASX810 siren models	51,84
82441701	ASX700 - 800 - 810	4 Meter wiring, waterproof connectors, for ASX700, ASX800 and ASX810 siren models	74,88
82441702	ASX710	1 Meter wiring, waterproof connectors, for ASX710 siren model	68,38
82441703	ASX710	4 Meter wiring, waterproof connectors, for ASX710 siren model	94,68
Speakers			
2021069	AL-ALX	70W Compact speaker, 4 Ohms, neodymium driver, reduced dimmensions, 117dB, 12V, black colour, mount bracket included	62,10

* Do not connect only 1 speaker to 24V.



SOUNDSTAR-D Series

The **SCS1000** compact siren is a powerful acoustic signalling system with built-in amplifier and loudspeaker in a single unit.

It is built of ABS with glass fibre and injected aluminium. The SCS1000 siren includes 16 pre-programmed tones which are easy to select using the microswitches conveniently located on the back of the siren. The fuse is included also in the back. A mesh filter prevents solid particles from entering the siren, while a drainage system prevents the accumulation of water on the membrane. A rubber seal joint prevents water from entering the electronic circuits. It includes a vehicle mount system valid for motorcycles or priority vehicles. Siren control is by external switches.

Soundstar is available as Standard or Neodymium versions.

Accessories include ALS1000 (30 W compact loudspeaker), SCS1000-PA (Public address kit) and SCS1000-SBLOCK (anti-vibration kit).



	Ferrite	Neodymium
Voltage	12 V	
Operating temperature	-30°C to +50°C	
Output power	30 W + 30 W	
Coil impedance	6 Ohms	
Maximum consumption	3A (SCS1000-D) 6A (SCS1000-D + ALS1000-D)	
Output voltage	23Vpp	
Frecuencies and tones	32 selectable tones	
Acoustic pressure to 2m at 12v. Two tones (450Hz and 600Hz to 33c/m) (SCS1000-D)	109 dBA	111 dBA
Acoustic pressuer to 3,5m at 12v. Two tones (450Hz and 600Hz at 33c/m) (SCS1000-D + ALS1000-D)	114 dBA	116 dBA
Dimensions	Sirena: 135 x 110 x 113 mm	
Siren Weight	1.250 g	1.085 g
Speaker Weight	1.135 g	0,970 g

REF.	MOD.	DESCRIPTION	EURO
Ferrite Driver			
2020277	SCS1000-D	30W Compact Siren, ferrite driver, 32 selectable tones, w/ mounting hardware, w/o wiring harness, 12V, black colour (connectors NOT included. See accesories)	223,83
2020277-BL	SCS1000-DBL	30W Compact Siren, ferrite driver, 32 selectable tones, w/ mounting hardware, w/o wiring harness, 12V, white colour (connectors NOT included. See accesories)	223,83
Neodymium Driver			
2020277N	SCS1000-DN	30W Compact Siren, neodymium driver, 32 selectable tones, w/ mounting hardware, w/o wiring harness, 12V, black colour (connectors NOT included. See accesories)	365,23
Mount Accesories			
8216113	SCS1000-PA	Public address kit, w/ volume and microphone functions control.	77,27
8299306	SCS1000-BLOCK	Silent block kit, SCS1000-D and ALS1000-D	24,28
8299910	8299910	Sealed connector for SCS1000-D	23,74
82441589	82441589	Motorcycle complete wiring harness (LD410, CO400, SCS1000-D)	303,14
82441588	82441588	Motorcycle complete wiring harness (LD400, CO400, SCS1000-D)	303,14
82441605	82441605	Wiring to adapt SCS1000 to SCS1000-D	38,59
MC300 Series			
4004233-01	MC300	Motorcycle Control allows to control all the functions of lights and siren of the 400 Solaris Series: priority warning lights (LD400 Solaris and CO400 Solaris, "Stop Light" function, cruise light and continuous siren	49,35
4004352	MC300/A	Motorcycle Control allows to control all the functions of lights and siren of the 400 Solaris Series: priority warning lights (LD400 Solaris and CO400 Solaris, "Stop Light" function, cruise light, continuous siren and power limiter	62,27

NEW AS600 Series

Federal Signal Vama presents its new siren amplifier **AS-600**, the smallest of the Federal Signal Vama's range. UN R65 approved, multivoltage.

Thanks to the possibility of reprogramming the tones, it can be easily adapted to any market need, following the regulations of the different countries and applications.

- COMPACT

Thanks to its small measures, the AS-600 siren amplifier can be integrated into a low profile lightbar.

- MULTIVOLTAGE

The AS-600 siren amplifier, is multivoltage (10V-30V), and it can be connected to any equipment.

- REPROGRAMMABLE TONES

The tones of the AS-600 can be reprogrammed by FSVAMA and its distributors through an external communication program.

- VERSATILITY

The AS-600 stands out for its great versatility in the way functions are activated. Both in analog mode, through switches, as in digital mode (CANBUS) with the corresponding controlheads, combining the use of these with the vehicle's horn.



Siren dimensions in mm.

Input Voltage:	10V - 30V
Speaker power:	100W
Light Output:	4x5A
Auxiliary Output:	1X5A
PAS (Public Address System):	Yes
Dimensions:	154 x 42,5 x 76 mm
Weight:	380 grs
Horn connection:	Yes
Light lamp failure:	Yes
Radiotelephone connection:	Yes
Programmable tones:	Yes
Tachograph:	Yes
Day/night function:	Yes
Lightbar function:	Yes

REF.	MOD.	DESCRIPTION	EURO
Analogical option			
100W siren amplifier integrated			
2020298	AS600-AN	100W AS600 Siren amplifier analogical, 5 aux. outputs, 10-30V. P.A. not included.	345,00
Cabling			
82441813		Cabling of 1 meter for AS600 analogical	30,00
82441813-01		Cabling of 4 meters for AS600 analogical	55,00
Public address			
8235970	PAC-AN	Public address kit with remote control. Volume and microphone functions control (for AS600 analogical Siren amplifier ref. 2020298) 12-24V	105,00
CAN BUS option			
100W siren amplifier integrated			
2020297	AS600-CB	100W AS600 CAN BUS Siren amplifier, 5 aux. outputs, 10-30V, P.A. not included.	365,00
Cabling			
82441812		Cabling of 1 meter for AS600 CAN BUS	30,00
82441812-01		Cabling of 4 meters for AS600 CAN BUS	55,00
Public address			
BCT2000			
8235984AUD	PA-CB12	Public address kit with remote control. Volume and microphone functions control for AS600 (for control head BCT2000) 12V	73,33
82351038AUD	PA-CB24	Public address kit with remote control. Volume and microphone functions control for AS600 (for control head BCT2000) 24V	73,33
BCT3000			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT3000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT3000) 24V	73,33

AS400 Series

The **AS400 Series** brings together priority lights, auxiliary lights and siren in just one control unit. The siren is compact and easily installed. Made of black aluminium for easy and unobtrusive vehicle installation (trunk or under seat).

The control head is in black nylon and includes a microphone with public address. The keypad is in translucent silicon, with built-in illumination for easier use in poor lighting conditions. These materials make the control head totally robust and water-resistant.

The volume control and on/off switch are located in the intermediate connection box.

Two basic models are available:

AS-422 siren amplifier with two light outputs.

AS-422/6S siren amplifier with six light outputs and two multi-function keys for light control.



AS-422

Voltage:	12 or 24 V
Output power speaker:	100 W
Light outputs:	2 x 10 Amp
Auxiliary output:	1 x 10 Amp
Dimensions:	Siren: 65 x 130 x 165 mm Control head: 25 x 50 x 105 mm
Weight:	Siren: 1500 g
Control head:	Number of keys: 10
Horn ring connection Lamp failure connection Radio connection	

* AS-422 (2020155) with the ES100C speaker, complies with the acoustic specifications according to SAE J1849-Revised OCT2012.

AS-425

Voltage:	12 or 24 V
Output power speaker:	100 W
Light outputs:	2 x 10 Amp
Auxiliary outputs:	1 x 10 Amp
Outputs for external relays:	1 x 1 Amp
Dimensions:	Siren: 215 x 135 x 54 mm Control head: 25 x 50 x 105 mm
Weight:	Siren: 1500 g
Control head:	Number of keys: 10
Horn ring connection Lamp failure connection Radio connection	

AS-422/6S

Voltage:	12 or 24 V
Output power speaker:	100 W
Light outputs:	2 x 10 Amp
Auxiliary outputs:	6 x 10 Amp
Dimensions:	Siren: 215 x 135 x 54 mm Control head: 25 x 50 x 105 mm
Weight:	Siren: 1500 g
Control head:	Number of keys: 10
Horn ring connection Lamp failure connection Radio connection	

REF.	MOD.	DESCRIPTION	EURO
Sirens w/ public address (P.A.)			
2020155	AS-422	100W Siren amplifier, (3) tones, remote control, P.A., (2) light control outputs w/ relays, wiring harness, 12V	661,46
2020156	AS-422-24	100W Siren amplifier, (3) tones, remote control, P.A., (2) light control outputs w/ relays, wiring harness, 24V	661,46
2020141	AS-422/6S	100W Siren amplifier, (3) tones, remote control, P.A., (8) light control outputs w/ relays, wiring harness, 12V	731,95
2020162	AS-422/6S-24	100W Siren amplifier, (3) tones, remote control, P.A., (8) light control outputs w/ relays, wiring harness, 24V	731,95
2020099	AS-425	100W Siren amplifier, (3) tones, remote control, P.A., (4) light control outputs w/ relays, lamp failure detection, wiring harness, 12V	728,34
2020103	AS-425-24	100W Siren amplifier, (3) tones, remote control, P.A., (4) light control outputs w/ relays, lamp failure detection, wiring harness, 24V	728,34

AS300 Series

The **AS-300 Series** comes in 5 different models specially designed for each application: AS-320DIG, AS-324 and AS-380.

All models include a siren amplifier in black anodized aluminium for unobtrusive on-board installation. The AS300 siren amplifier includes a kit for fast and easy mounting.

- **AS-320DIG** includes a small and compact remote control for controlling lights, siren and public address with volume control. Also includes an alternative switch-operated control system.

- **AS-324** has a switch-operated control system only.

- **AS-380** delivers 400W power via a slave amplifier. Includes remote control pad.



Voltage:	12 or 24 V
Output power speaker:	100 W
Light output:	1 x 10 Amp
Auxiliary output:	1 x 1 Amp
Dimensions:	Siren: 170 x 135 x 55 mm Control head: 115 x 42 x 35 mm
Weight:	Siren: 1300 g
Radioconnection	
Horn ring connection	
Lamp failure connection	

* AS-320DIG (2020256) with the ES100C speaker, complies with the acoustic specifications according to SAE J1849-Revised OCT2012.

REF.	MOD.	DESCRIPTION	EURO
Sirens w/ public address (P.A.)			
2020256	AS-320DIG	100W Siren amplifier, (3) tones, remote control, P.A., (1) light output, (1) auxiliar output, wiring harness, 12V	395,08
2020257	AS-320-24DIG	100W Siren amplifier, (3) tones, remote control, (2) lights outputs, (1) auxiliar output, wiring harness, 24V	395,08
2020236	AS-380M	100W + 100W Siren amplifier, (4) tones, remote control, P.A., wiring harness, 12V	301,53
2020237	AS-380S	Amplifier for installation along with model AS-380M. Together offer a maximum power of 400W.	270,99
100W Siren amplifier			
2020269	AS320DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 12V. Compatible only with BCT2000 and BCT500CB Series control heads. P.A not included	355,86
2020271	AS320-24DIG CAN BUS	100W siren amplifier, international tones (wail, yelp, hi-lo), 1 auxiliary output programmed with Priority lights, wiring, 24V. Compatible only with BCT2000 and BCT500CB Series control heads. P.A not included	360,40
Public address			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT) 24V	73,33
Sirens w/o public address (P.A.)			
2020188	AS-324	100W Siren amplifier, (2) tones, remote control, w/o P.A., (2) lights outputs, (1) auxiliar outputs, wiring harness, 12V	346,91
2020183	AS-324-24	100W Siren amplifier, (2) tones, remote control, w/o P.A., (2) lights outputs, (1) auxiliar outputs, wiring harness, 24V	346,91



FEDHORN System

The **FEDHORN system** is an electronic sirens system with horn sound.

- HORN SOUND

Two synchronized sirens connected to two 100W speakers reproduce the sound of horn by electronic technology.

- EASY INSTALLATION

Compact and modular system with an easy fitting into the vehicle, taking advantage of every space inside it.

- EASY MAINTENANCE

Elimination of maintenance cost associated to oil compressor and air membranes systems due to use of a fully electronic system.

- FLEXIBILITY

Specific configuration for different countries.

- PUBLIC ADDRESS OPTION

Remote microphone connection.

- DAY/NIGHT

An internal sound damping assure a sound reduction during the night.

- CANBUS

Communication System between lights, sirens and controller head. This system minimizes wiring installation and allows controlling all the elements by a single remote control.



Current Draw:	12V	24V
Output power with 13.5V:		
with one 11 ohm speaker:	100 W	100 W
with two 11 ohm speaker:	180 W	180 W
Intensity with one 11 ohm speaker:	10 A maximum	5 A maximum
with two 11 ohm speakers:	18 A maximum	8 A maximum
Output voltage:	60V	60V

Frequencies (depending on siren version) 600- 1350 Hz

WAIL	12 cycles per minute
YELP	180 cycles per minute
BITONAL	450 - 600Hz
Harmonic distortion	0,87% (35 W, 100 Hz)
Passing band +/- 3 dB	90 Hz - 28,000 Hz
Radio signal level	2,5 V maximum

Intensity of auxiliary outputs

Lights relay	10 A maximum
Auxiliary relay	1 A maximum
Operating temperatures	-30°C - +50°C
Shipping weight	1300 gr (each siren)
Amplifier dimensions	55 x 135 x 170 mm

REF.	MOD.	DESCRIPTION	EURO
KC FEDHORN-12		2x100W Sirens System (master/Slave) with horn sound, international tones (wail, help, hi-lo), 1 auxiliary output programmed with priority lights, wiring, 12V. Compatible only with BCT2000 Series (*)	711,72
KC FEDHORN-24		2x100W Sirens System (master/Slave) with horn sound, international tones (wail, help, hi-lo), 1 auxiliary output programmed with priority lights, wiring, 24V. Compatible only with BCT2000 Series (*)	720,80
Public address			
8235984	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 12V	73,33
82351038	AS320-PA CB	Public address kit with remote control. Volume and microphone functions control (for control head BCT2000) 24V	73,33
Speakers (two units are necessary)			
2021047	AL-252N	100W Speaker, round horn, replaceable neodymium driver, metal L- bracket (1)	240,86
2021004	AL-257N	100W Speaker, rectangular horn, driver housing, exterior protector, white	355,00
ES100C	ES100	ES100 100W Compact Speaker, w/o bail bracket compact, small size	295,68
Mount Accessories			
ESB-U	MNT-ES100	Speaker mounting kit ES100	38,78
CANBUS Control Box			
BCT2010-09	BCT2009	BCT2000 Series control box with 10 keys to control: Priority lights, Cruise light, Day/night mode, Take down lights, Rear lights, Alley lights and tacograph. Siren with wail, stand/land and FEDHORN tones, Manual mode and Radio.	142,12
BCT2015-19	BCT2015	BCT2000 Sereies control box with 15 keys to control: Priority lights, Cruise lights, Day/night mode, Take down lights, Alley lights and Signalmaster. Siren with wail, yalp, bitonal, FEDHORN tones, high/low intensity, Manual model and Radio.	158,60
Connectors kit for CANBUS Control Head			
8299753		Connectors kits for Control HEAD (It is necessary when there is no lightbars on the system)	27,22

(*) Must be specified when ordering, which international tones are desired

AS200 Series

The **AS-250 Series** is totally water-resistant thanks to its extruded casing and connector assembly with Santoprene sheath for full weather insulation of electrical connections. This electronic siren is made of extruded black anodized aluminium. The AS-250 Series is controlled by using external switches.

Also available (optional): shock-absorbent silent block for use in conditions subject to intense vibration.



Voltage:	12 V
Output power speaker:	100 W
Auxiliary output:	1 x 1 Amp
Dimensions:	180 x 86 x 60 mm
Weight:	600 g
Horn ring connection	

REF.	MOD.	DESCRIPTION	EURO
Sirens w/o public address (P.A.)			
2020147	AS-250	100W Siren amplifier, (3) tones, w/o P.A, (1) auxiliary output, waterproof, w/o wiring harness, 12V	279,00
Mount Accessories			
8232445	KT/BLOK-FA/AS	Kit, silent block, FA-535D, FA-706E, FA-540/E, FA-540/E HL, FA-706 and AS-250	5,80

PA300-FSV

The PA300-FSV electronic siren delivers exceptional performance and durability thanks to its integrated circuits and silicon transistors.

This siren offers multiple features such as peak-and-hold and TAP II, which enables the driver to change the siren tone via the vehicle's horn ring or any remotely mounted switch. The public address includes a system to remove interference that provides high-quality voice reproduction.

The PA300-FSV series is approved according to the European Regulation R10.



Voltage:	12 or 24 V
Output power speaker:	200 W
Dimensions:	194 x 156 x 59 mm
Weight:	2900 g

REF.	MOD.	DESCRIPTION	EURO
Sirens w/ public address (P.A.)			
2020293	PA300-FSV12	200W Siren amplifier, (5) tones, P.A., 12V	518,30
2020292	PA300-FSV24	200W Siren amplifier, (5) tones, P.A., 24V	535,10
SIREN Accessories			
Mount Accesories			
8216117	AV-D/N	Power limiter for siren amplifier - day/night -	53,80
2006021	SF-20A	Lamp failure detector, 12V	34,63
2006024	SF-20A-24	Lamp failure detector, 24V	33,63

AL-252N

This speaker is equipped with 100 W Neodymium motor, 11 Ohms impedance. The round ABS diffuser is designed for better sound propagation and includes a black anodized L-bracket for mounting.

The Neodymium loudspeaker motor is lighter and smaller than ferrite models.



Power:	100 W
Ohm:	11
Driver:	Neodymium
Dimensions:	150 x 135 mm

AL-257N

AL-257 is a white 100 W high-performance loudspeaker, 11 Ohms impedance. Its rectangular ABS diffuser with easy-to-replace motor stands out for its durability and reliability.

It includes a flat base for mounting on vehicle roofs.



Power:	100 W
Ohm:	11
Driver:	Neodymium
Dimensions:	210 x 223 x 155 mm (Height incl. mounting kit: 180 mm)

REF.	MOD.	DESCRIPTION	EURO
2021047	AL-252N	100W Speaker, round horn, replaceable neodymium driver, metal L- bracket (1)	240,86
2021004	AL-257N	100W Speaker, 11 Ohms, ABS rectangular horn, exchangeable neodymium driver, exterior protector, high performance, white	355,00

(1) We have a large range of mounting brackets for undercover vehicles. Please check availability with our sales department

SOUNDSTAR ALS1000

The **ALS1000** compact loudspeaker is made of ABS with glass fibre and injected aluminium. This speaker features modern, compact design and fully compatible with other 30 W sirens.

A mesh filter prevents solid particles from entering the siren, while a rubber seal joint prevents water from entering the electronic circuits. It is equipped with drainage system to prevent water accumulation on the membrane.

ALS1000 is the perfect complement to the SCS1000 compact siren. Installed together they deliver 60 W of power.



Power:	30 W
Ohm:	6
Driver:	Neodymium or Ferrit
Dimensions:	135 x 110 x 113 mm
Weight:	1150 g

ES100C

The **DynaMax** offers a unique design which enables to install the speaker in many locations on ambulance cars. It can be mounted easily behind the grille or flush between bumper and hose tray of a large apparatus.



Power:	100 W
Ohm:	11
Dimensions:	140 x 150 x 58 mm
Weight:	2300 g

AS124

AS124 Series speaker uses advanced housing material and field replaceable neodymium drivers to provide effective, high quality sound at an affordable price.

The housing is made of black polyethylene terephthalate, which made the speaker very lightweight, robust and water-resistant.

It includes a mounting kit for easy vehicle installation.



Power:	100 W
Ohm:	11
Driver:	Neodymium
Dimensions:	196 x 119 x 145 mm
Weight:	2900 g

REF.	MOD.	DESCRIPTION	EURO
Ferrite Driver			
2020278	ALS1000-D	30W Compact speaker, 6 Ohms, ferrite driver, reduced dimensions, 12V, black colour	99,98
2020278-BL	ALS1000-DBL	30W Compact speaker, 6 Ohms, ferrite driver, reduced dimensions, 12V, white colour	99,98
Neodymium Driver			
2020278N	ALS1000DN	30W Compact speaker, 6 Ohms, neodymium driver, reduced dimensions, 12V, black colour	172,86
750501	AS124	High output 100W Speaker, 11 Ohm, neodymium driver, mount hardware	213,29
ES100C	ES100	ES100 100W Compact Speaker, w/o bail bracket compact, small size	295,68
Mount Accesories			
ESB-U	MNT-ES100	ES100 mounting kit	38,78
8299306	SCS1000-BLOCK	Kit, silent block for SCS1000 and ALS1000	24,28



CONTROLLERS

- ▶ **ICS2009 Series.....92**
- ▶ **Direct wire converter.....92**
- ▶ **GEP2006PW Series.....92**

ICS2009 Series

ICS2009 Series consists of an electronic power supply manager and a control head.

Electronic power supply modules are small and compact. The control module is powered by just 2 cables. Installation is quicker than for a conventional system and the outputs are fully protected against polarity reversal, overloading and short-circuits.

Control heads stand out due to their compact, ergonomic design. Safe and easy to handle, they are fitted with a backlit keypad. Logos and keys can be personalised by the user, thanks to adhesive labels with a wide range of symbols.



ICS2009

Direct wire converter

CAN BUS system power manager can manage, through an analogic control head, any CAN BUS emergency vehicle light in a simple way.



CAN BUS converter

GEP2006PW Series

GEP2006PW Series, an analogic system power manager from Federal Signal Vama can manage, through a CAN BUS control head, any analogical emergency vehicle light in a simple way.

This power manager could be controlled by following control heads, depending on final user needs:

- BCT2004-10: 4-buttons control head for R65 main warning lights, front and rear lights, lighted sign, etc.
- BCT2006-10: 6-buttons control head for above functions and, furthermore, cruise light, etc.



GEP2006PW

REF.	MOD.	DESCRIPTION	EURO
ICS2009 Series			
ICS2009ST-12	ICS2009	Intelligent CanBus control system with SignalMaster control, (4) more outputs, fully protected against polarity, reversal, overloading and short-circuits. Control head with (9) backlit-keys, 12V/24V	370,10
CAN BUS converter - ANALOG			
2006036		Inputs box to convert a CAN BUS lightbar in an analog system (the fuctions are activated through positive cable)	80,67
Analogical controllers			
2020283PW-02	GEP2006	Control box to convert analogical lightbars to CAN BUS communication, 4 outputs, 12V	106,01
2020283PW-03	GEP2006	Control box to convert analogical lightbars to CAN BUS communication, 6 outputs, 12V	142,89
Control heads			
BCT2004-10	BCT2004	BCT2004-10,CANBUS control head for GEP2006PW 4S with 4 backlight keys. With two mounting systems: swivel or permanent mount. Control of 4 analogic outputs.	119,36
BCT2006-10	BCT2006	BCT2006-10,CANBUS control head for GEP2006PW 6S with 6 backlight keys. With two mounting systems: swivel or permanent mount. Control of 6 analogic outputs.	127,34
82441626		Connection kit between BCT CAN BUS control head and GEP2006PW intelligent power manager.	32,57

ACCESSORIES

- **Rechargeable flares.....94**
- **Gun-locks.....95**
- **Rechargeable flashlights.....96**
- **Reading lamps.....98**
- **Control units.....99**
- **Back-up alarms.....100**
- **Lighting accessories.....101**

NEW ROAD SAFETY FLARE Series

Federal Signal Vama presents the rechargeable and sequential **Road Safety Flare**, which incorporates a radio-linked network to switch automatically the flash pattern of each flare. Vehicles approaching to an emergency situation are guided by the light sequence of the Road Safety Flare. It is very easy to use, just leave the flare on the road, push a button and all the flares are automatically synchronized.

- RECHARGEABLE

The Road Safety Flare is rechargeable and its autonomy is 24 hours. It could be charged by using a cigarette plug, using a wall charger or direct wearing in the vehicle battery. The battery status could be checked simply pushing a button.

- SYNCHRONIZABLE

Just leave the flare on the road, push a button and all the flares will be automatically synchronized their flash pattern. Also, one flare or all the flares can be switch off by pushing a button.

- FLEXIBILITY

The Road Safety Flare can be attached to back of the vehicle thanks to its magnetic base, or could be deployed on the road. The flare automatically chooses top or side LEDs based on angle orientation of the flare.



- EASY STORAGE

The Road Safety Flare is easily stored in a compact carrying case that can be stored in the vehicle trunk without taking up space.

- MULTICOLOUR

Case and LEDs available in blue or amber colours.

- RUGGED AND PREPARED TO WORK IN EXTREME CONDITIONS

The Road Safety Flare is IP66 approved, that allows to work in adverse weather conditions such as rain, snow, ice, etc. The flares can support a weight up to 12.000 kg.

- 5 TYPES OF FLASH PATTERNS

The Road Safety Flare has 5 types of flash patterns which are adapted to each necessity. The flash pattern could be changed only pushing a button.

- 360° LIGHT DISTRIBUTION

The LEDs distribution of the Road Safety Flares allows to be seen in 360°.

REF.	MOD.	DESCRIPTION	EURO
Amber case			
N 2201060A		Carrying case with 2 rechargeable LED flares, amber case, amber top LEDs, amber side LEDs, cigarette plug and wall charger.	345,40
N 2201061A		Carrying case with 4 rechargeable LED flares, amber case, amber top LEDs, amber side LEDs, cigarette plug and wall charger.	722,20
N 2201062A		Carrying case with 6 rechargeable LED flares, amber case, amber top LEDs, amber side LEDs, cigarette plug and wall charger.	1.036,20
N 2201063A		Carrying case with 10 rechargeable LED flares, amber case, amber top LEDs, amber side LEDs, cigarette plug and wall charger.	1.570,00
Blue case			
N 2201064A		Carrying case with 2 rechargeable LED flares, blue case, blue top LEDs, blue side LEDs, cigarette plug and wall charger.	351,68
N 2201065A		Carrying case with 4 rechargeable LED flares, blue case, blue top LEDs, blue side LEDs, cigarette plug and wall charger.	734,75
N 2201066A		Carrying case with 6 rechargeable LED flares, blue case, blue top LEDs, blue side LEDs, cigarette plug and wall charger.	1.055,03
N 2201067A		Carrying case with 10 rechargeable LED flares, blue case, blue top LEDs, blue side LEDs, cigarette plug and wall charger.	1.601,38

AMK Series

The safety gun-locks offer a protection system when the weapon is not in use and prevent access by non-authorized personnel, thus avoiding the risk of accidents.

There are different standard models available, with electromagnetic unblocking, by means of key or a combination of both.



AMK-50



AMK-100



AMK-150

REF.	MOD.	DESCRIPTION	EURO
1204001	AMK-50	Safety Gun-Lock fitted w/ electromagnetic lock, adjustable to different guns, cavity dimensions: min: 58 x 43 mm, max: 58x 78 mm	255,92
1204006	AMK-100	Safety Gun-Lock fitted both w/ electromagnetic and manual (key) lock, cavity dimensions: 47 x 70 mm	243,87
1204023	AMK-150	Safety Gun-Lock fitted both w/ electromagnetic and manual (key) lock, cavity dimensions: 29 x 56 mm	243,87

(*) Optional the Gun-Lock can be installed over the Divider Shield

Accessories

1204017	TA-210	Timer for Gun-lock, electromagnetic	60,73
8216091	SW-523	OFF-ON Push button, illuminated w/ protection	17,23
9133436	ACUAL	Rifle stock support	3,16

L500 Series

L500 series stands out for robust, reliable and rechargeable flashlights for professional use. L500 series flashlights are watertight and shock-resistant thanks to their aluminium and polyamide construction, with high-luminosity halogen lamps providing adjustable beam spread and a rubber optics guard ensuring shock absorption in the event of knocks and falls.

Operating with nickel metal hydride batteries, they offer durability without memory effect of conventional battery performance.

The L500 series comes in different versions: standard, flashing mode, LED, with normal or fast charger.

The new versions are Full LEDs and are available with (20) white light luminosity LED or with strobe flashing mode.

Available accessories: light-spreader cones, light-spreader paddle "STOP/ARROW SIGN", metal bracket for storage of cones and paddles, multiple charger for 5 flashlights, etc.

* Charger sold separately.



L560 LED flashlight



Rechargeable LED flashlight



Rechargeable LED capacitors flashlight

REF.	MOD.	DESCRIPTION	EURO
LED capacitors flashlights			
2101153	L-550C/S	Rechargeable LED capacitors flashlight, 1 LED diode, (2) light levels, adjustable focus, w/out charger, multivoltage 10-30V.	196,00
LED flashlights			
2101171	L-560LEDS/S	Rechargeable LED flashlight, 1 LED blanco, (2) light levels and strobe flashing, adjustable focus, w/out charger, 10-30V.	175,00
2102018	L-500RFLED/BL/S	Rechargeable LED flashlight, 3 LED diodes flashlight, (20) white high luminosity LED, (2) light levels, adjustable focus, fast charge time, w/out charger, 12V	229,00
2102019	L-500RFLED/S	Rechargeable LED flashlight, 3 LED diodes flashlight, (2) light levels and strobe flashing, adjustable focus, fast charge time, w/out charger, 12V	189,98
2101117	L-500LED/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (20) high luminosity LED (10 LED red colour and 10 LED amber colour), (1) light level, standard charge time, adjustable focus, w/out charger, 12V	166,97
2101120	L-500RLED/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (20) high luminosity LED (10 LED red colour and 10 LED amber colour), (1) light level, fast charge time, w/out charger unit, adjustable focus, 12V	170,19
2101120-01	L-500RLED/BL/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (20) white high luminosity LED, (1) light level, fast charge time, adjustable focus, w/out charger, 12V	208,36
Flashing mode flashlights			
2101110	L-500I/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (1) light level, flashing, standard charge time, adjustable focus, w/out charger, 12V	133,26
Standard flashlights			
2101096	L-500/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (2) light levels, standard fast charge time, adjustable focus, w/out charger, 12V	133,26
2101123	L-500R/S	Rechargeable flashlight w/ 6V 10W halogen lamp, (2) light levels, fast charge time, adjustable focus, w/out charger, 12V	137,17

RECHARGEABLE FLASHLIGHTS

	L500	L500R	L550	L560
Voltage:	12V	12V	10-30V	10-30V
Halogen lamp:	Bi-pin G4 6V 100W	Bi-pin G4 6V 100W	-	-
Amber/red LEDs:	10/10 LEDs	10/10 LEDs	-	-
White LEDs:	3 LEDs	20 LEDs	1 LED	1 LED
Rechargeable battery:	Niquel-Metal Hidruro 6V 3'5 Ah	Niquel-Metal Hidruro 6V 3'5 Ah	Capacitors	LiFePo4 3'2V 5 Ah
Charge time:	30 hours	2 hours and 30 minutes	6 min	< 4h
Battery life:	Amber/red LEDs: 24h White LEDs: 6-12h Flashing mode: 2h 40' High intensity: 2h Low intensity: 2h 40' High intensity 3 LEDs: 2h 30' Low intensity 3 LEDs: 3h 40' Flashing mode 3 LEDs: 2h	Amber/red LEDs: 24h White LEDs: 6-12h Flashing mode: 2h 40' High intensity: 2h Low intensity: 2h 40' High intensity 3 LEDs: 2h 30' Low intensity 3 LEDs: 3h 40' Flashing mode 3 LEDs: 2h	45 min. High intensity/flashing mode 3 hours low intensity	>2h high intensity >6h flashing mode >8h low intensity

REF.	MOD.	DESCRIPTION	EURO
Accessories			
Flashlight Charger * Charger sold separately			
2101176REC	CL-560	Standard flashlight charger for L560 Series flashlights, 10-30V	93,00
2101094REC	CL-510	Standard flashlight charger for L500 Series flashlights, 12V	61,90
2101121REC	CL-510R	Fast flashlight charger for L500R Series flashlights, 12V	141,27
2101098	CM-510	Multiple charger, (5) L500 Series flashlights, 220V	408,38
2102013	AL-500/400	Adapter, 12VDC/220V AC, for CL510 and CL510R flashlight charger	53,96
2101154REC	CL-550	Capacitors flashlight charger for L550C Series, multivoltage 10-30V	107,5
Light-Spreader			
9151270	DL-500	Light-spreader cone for L500 series flashlight, (fluorescent yellow colour)	4,71
9151270-01	DL-500	Light-spreader cone for L500 series flashlight, (fluorescent red colour)	4,71
9151270-02	DL-500	Light-spreader cone for L500 series flashlight, white (Recommended the use with L500LED flashlight series for signaling traffic)	4,71
2101099	DL-500/2C	Light-spreader cone for L500 series flashlight, amber/red spreading-Lens.	24,76
2101100	DL-500/3C	Light-spreader cone for L500 series flashlight series, white/ amber/red spreading-Lens.	24,76
2101101	DL-500/3C	Light-spreader cone for L500 series flashlight, white/ green/red spreading-Lens.	24,76
Paddles			
1005066	PD-500	Luminous paddle for L500 series flashlight w/ 'Stop' and Arrows Signs.	27,18
Support for light-spreader and paddle			
8299018	SCO-500/400	Metal bracket for flashlight cone, black	12,91
8136813	SPD-500/400	Luminous paddle metal bracket, Series L500	12,91

LITTLITE

Sleek, low profile gooseneck lamps efficiently produce light in a concentrated area and can be aimed exactly where you need it.

Littlite is designed to meet the most demanding needs. The bright white light is perfect for reading maps, etc.

Littlite is available with halogen lamp or as LED version.



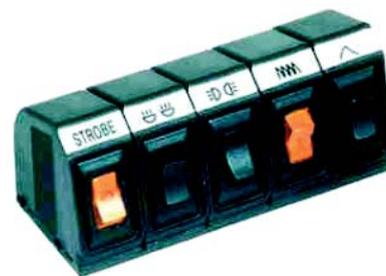
Voltage:	12 V
Consumed intensity:	Hallogen: 0.5 Amp LED: 0.1 Amp
Dimensions:	18 x 76 x 25 mm
Gooseneck length:	Depending on model
Weight:	500 g

REF.	MOD.	DESCRIPTION	EURO
LED			
LF12ES-LED	LF12ES-LED	12" Littlite Model, LED Lamp, metal Bracket, 12V, on/off switch control, 30cm gooseneck	134,49
LF18ES-LED	LF18ES-LED	18" Littlite Model, LED Lamp, metal Bracket, 12V, on/off switch control, 45cm gooseneck	138,57
2101131-01	LEC-35	LED lamp reading, with flange, on/off switch control, 35cm gooseneck	84,05
2101130-01	LEC-50	LED lamp reading, with flange, on/off switch control, 50cm gooseneck	94,56
HALOGEN			
5001048	LF12ER	12" Littlite Model, Halogen Lamp, metal Bracket, 12V, Rheostat control, 30cm gooseneck	80,90
5001153	LF18ERB	18" Littlite Model, Halogen Lamp, metal Bracket, 12V, wires from base, Rheostat control, 45cm gooseneck	84,75

* All references above have 1 year warranty minimum (parts & labour). For more information, please refer to the price list (Sales conditions-Limited warranty) or contact our sales department.

SW Series

The **SW Series** of switches is made in black plastic for unobtrusive installation in vehicles or on motorcycles. They include illuminated function displays and protective rubber cases ensuring water-resistance in wet conditions.



REF.	MOD.	DESCRIPTION	EURO
8216090	SW-521	ON-OFF Switch, illuminated w/ protection	16,40
8216089	SW-522	ON-OFF-ON Conmuter, illuminated w/ protection	17,23
8216091	SW-523	OFF-ON Push button, illuminated w/ protection	17,23
Mounts Accesories			
8150748	BM-SW2	Metal base (2) SW Series switches	4,49
8150749	BM-SW3	Metal base (3) SW Series switches	6,09

Voice Gun

Electronic Voice gun megaphone, with batteries, ABS resistant housing and trigger button.

A12SA

Power:	16 W
Batteries:	8 x "AA"
Dimensions:	267 x 257 x 185 m
Weght:	1400 g



REF.	MOD.	DESCRIPTION	EURO
2020118	A12SA	Voice gun megaphone, 16W output, aproximate range 400 meters, (batteries not included)	868,06

Back-up alarms

Federal Signal **back-up alarms** are dependable, affordable alarms ideal for use on utility, construction and other specialty vehicles. Each of the models features a glass reinforced nylon housing for long-lasting durability that can be steam cleaned.

The **EVACUATOR (Plus)** models are available with dual- or single-function feature. The dual-function feature allow users to choose from a 'pulse' tone, which is intermittent signal used for back-up warning, or a 'constant-on' tone, which is a solid signal that can be used to signal motion such as a truck-platform lifting or moving outriggers. Single-function models only have the 'pulse' tone.



252

This small device can alert the other vehicles in the reversing maneuver, intermittent beeping.



EVACUATOR
frontal



EVACUATOR
rear

Voltage:	210333/210335 - 9-48 VDC
Current Draw (at 12vdc):	210333/210335 - 0.17 Amp
Sound Output:	210333 - 107dB 210335 - 112dB
Dimensions:	73 x 73 x 62mm
Ship Weight:	0.3 kg - 210504 : 0.9kg

REF.	MOD.	DESCRIPTION	EURO
2020107	252SSG	Alarm, 97 dB, 12-48V	75,29
210333	210333SSG	Evacuator Plus, 12-48V, output 107 dBA	63,29
210335	210335SSG	Evacuator Plus, 12-48V, output 112 dBA	74,20

AIREL Series

Illuminated Thermal and infrared Identification System

AIREL is a patented Identification System utilizing illuminated/thermal/infrared numbers that gives aerial and ground units the ability to establish quick visual identification of Public Safety, Military and Industrial vehicles.

It is made with an electroluminescent material that provides years of illumination and identification.

- QUICK IDENTIFICATION

Enables vehicles to be identified in low light conditions by airborne helicopters with a powerful illumination.

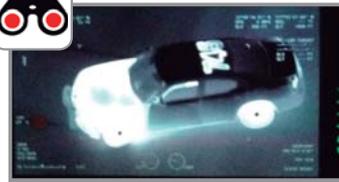
- EASY INSTALATION

Industrial Strength adhesive backing 3M.

- ENERGY EFFICIENT

Powerful illumination provided by a Screen printing process that utilizes phosphors and silver as conductive layers that are electrically powered by an inverter.

4



Perfect vehicle identification in low ambient light, with its thermal and infrared lighting.



- WEATHERPROOF

Highly advanced embedded circuitry.

- STEALTH MODE

Thermal/infrared identification by using an additional power supply allowing units on the field operate on undercover operations.

- ELECTROLUMINISCENCE

Proven in military uses.

REF.	MOD.	DESCRIPTION	EURO
Illuminated letters 20"			
9010313	AELL-A	"A" letter, height 50 cm. (20"), blue	273,02
9010314	AELL-B	"B" letter, height 50 cm. (20"), blue	273,02
9010315	AELL-C	"C" letter, height 50 cm. (20"), blue	273,02
9010316	AELL-D	"D" letter, height 50 cm. (20"), blue	273,02
9010317	AELL-E	"E" letter, height 50 cm. (20"), blue	273,02
9010318	AELL-F	"F" letter, height 50 cm. (20"), blue	273,02
9010319	AELL-G	"G" letter, height 50 cm. (20"), blue	273,02
9010320	AELL-H	"H" letter, height 50 cm. (20"), blue	273,02
9010321	AELL-I	"I" letter, height 50 cm. (20"), blue	273,02
9010322	AELL-J	"J" letter, height 50 cm. (20"), blue	273,02
9010323	AELL-K	"K" letter, height 50 cm. (20"), blue	273,02
9010324	AELL-L	"L" letter, height 50 cm. (20"), blue	273,02
9010325	AELL-M	"M" letter, height 50 cm. (20"), blue	273,02
9010326	AELL-N	"N" letter, height 50 cm. (20"), blue	273,02
9010327	AELL-O	"O" letter, height 50 cm. (20"), blue	273,02
9010328	AELL-P	"P" letter, height 50 cm. (20"), blue	273,02
9010329	AELL-Q	"Q" letter, height 50 cm. (20"), blue	273,02
9010330	AELL-R	"R" letter, height 50 cm. (20"), blue	273,02
9010331	AELL-S	"S" letter, height 50 cm. (20"), blue	273,02
9010332	AELL-T	"T" letter, height 50 cm. (20"), blue	273,02
9010333	AELL-U	"U" letter, height 50 cm. (20"), blue	273,02
9010334	AELL-V	"V" letter, height 50 cm. (20"), blue	273,02
9010335	AELL-W	"W" letter, height 50 cm. (20"), blue	273,02
9010336	AELL-X	"X" letter, height 50 cm. (20"), blue	273,02
9010337	AELL-Y	"Y" letter, height 50 cm. (20"), blue	273,02
9010338	AELL-Z	"Z" letter, height 50 cm. (20"), blue	273,02

(*) Please consult availability before make the order

REF.	MOD.	DESCRIPTION	EURO
Illuminated numbers 10"			
9010357	AELN10-0	"0" Illuminated number, height 25 cm, (10"), blue	204,42
9010358	AELN10-1	"1" Illuminated number, height 25 cm, (10"), blue	204,42
9010359	AELN10-2	"2" Illuminated number, height 25 cm, (10"), blue	204,42
9010360	AELN10-3	"3" Illuminated number, height 25 cm, (10"), blue	204,42
9010361	AELN10-4	"4" Illuminated number, height 25 cm, (10"), blue	204,42
9010362	AELN10-5	"5" Illuminated number, height 25 cm, (10"), blue	204,42
9010363	AELN10-6	"6" Illuminated number, height 25 cm, (10"), blue	204,42
9010364	AELN10-7	"7" Illuminated number, height 25 cm, (10"), blue	204,42
9010365	AELN10-8	"8" Illuminated number, height 25 cm, (10"), blue	204,42
9010366	AELN10-9	"9" Illuminated number, height 25 cm, (10"), blue	204,42
Illuminated numbers 15"			
9010303	AELN15-0	"0" Illuminated number, height 38 cm, (15"), blue	259,28
9010304	AELN15-1	"1" Illuminated number, height 38 cm, (15"), blue	259,28
9010305	AELN15-2	"2" Illuminated number, height 38 cm, (15"), blue	259,28
9010306	AELN15-3	"3" Illuminated number, height 38 cm, (15"), blue	259,28
9010307	AELN15-4	"4" Illuminated number, height 38 cm, (15"), blue	259,28
9010308	AELN15-5	"5" Illuminated number, height 38 cm, (15"), blue	259,28
9010309	AELN15-6	"6" Illuminated number, height 38 cm, (15"), blue	259,28
9010310	AELN15-7	"7" Illuminated number, height 38 cm, (15"), blue	259,28
9010311	AELN15-8	"8" Illuminated number, height 38 cm, (15"), blue	259,28
9010312	AELN15-9	"9" Illuminated number, height 38 cm, (15"), blue	259,28
Illuminated numbers 20"			
9010287	AELN-0	"0" Illuminated number, height 50 cm, (20"), blue	273,02
9010288	AELN-1	"1" Illuminated number, height 50 cm, (20"), blue	273,02
9010289	AELN-2	"2" Illuminated number, height 50 cm, (20"), blue	273,02
9010290	AELN-3	"3" Illuminated number, height 50 cm, (20"), blue	273,02
9010291	AELN-4	"4" Illuminated number, height 50 cm, (20"), blue	273,02
9010292	AELN-5	"5" Illuminated number, height 50 cm, (20"), blue	273,02
9010293	AELN-6	"6" Illuminated number, height 50 cm, (20"), blue	273,02
9010294	AELN-7	"7" Illuminated number, height 50 cm, (20"), blue	273,02
9010295	AELN-8	"8" Illuminated number, height 50 cm, (20"), blue	273,02
9010296	AELN-9	"9" Illuminated number, height 50 cm, (20"), blue	273,02
Pod connector for each number or letter			
9010297	AEL-PODB	Pod connector, black colour, order 1 per number or letter	14,62
9010298	AEL-PODW	Pod connector, white colour, order 1 per number or letter	15,35
Inverter			
9010299	AEL-PX300	Inverter for 1 or 2 numbers or letters	410,21
9010300	AEL-PX450	Inverter for 3 numbers or letters	410,21
Infrared/thermal power supply			
9010301	AEL-PXIR	Infrared/thermal power supply for 1, 2 or 3 numbers and letters	410,20

Flashers and relays

Available is a wide range of flashers for LED and halogen lights. There are different models, like for flashing mode, simultaneous flashing, alternated flashing, etc.



REF.	MOD.	DESCRIPTION	EURO
650201	INTELLI-F	Intelli-Flash, (8) flash patterns, (2) outputs - 6Amp, 12V	185,34
 9019075	FHL-HL	7 selectable patterns, (2) 9,5 amp loads w/ high-beam deactivation	90,78
RI-V12	RI-FSV12	Vama Flashing relay, alternate & simultaneous, (2) wholes (2) lamps, 55w 12V	72,21
RI-V24	RI-FSV24	Vama Flashing relay, alternate & simultaneous, (2) wholes (2) lamps, 55w 24V	89,08
2006021	SF-20A	Speaker failure detection sensor, 12V	34,63
2006024	SF-20A-24	Speaker failure detection sensor, 24V	33,63
2006022	SF-20L	Lamp failure detection sensor, 12V	40,77

Risk Reduction: Priority Signaling

Increasing number of vehicles, slow, difficult and heavy traffic, driver distraction caused by radios, cell phones, conversations with other passengers, etc, hinder the work of emergency vehicles when they need to use its right of way, or indicate their presence at any time.

To ensure own and other citizens safety, emergency professionals should equip their vehicles with effective optical and acoustic signalling.

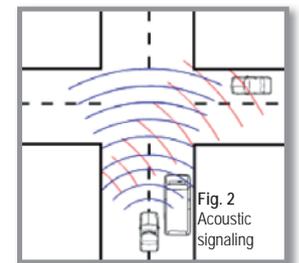
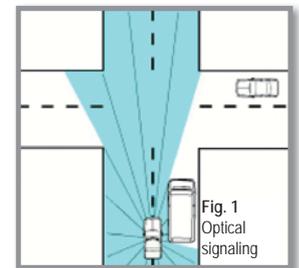
Optics and Acoustics Signs

In most European countries, priority vehicles must be identified by warning blue lights and sirens.

Optical signal (priority lights) is only visible with no obstacles between it and the observer. Once perceived by this observer, emergency vehicle identification is safe and immediate. (See Fig.1)

Audible signal (siren) is perceptible even if vehicle is not on observer's visual field, although by this way he does not identify easily priority vehicle. (See Fig.2)

Both systems are complementary and their combination ensures accurate identification, early enough to get a quick and safely passageway.



Light Sources and European Regulation

In Europe, warning lights must comply with R65 Regulation from Geneva Accords, which regulate flash frequency, intensity, colour, temperature, sealing, etc.

Lights regulations can be grouped into three categories: rotating (halogen lamp rotating beam), strobe (gas discharge lamp xenon) and LED diodes (light emitting diodes). Three technologies are used on emergency vehicles signalisation.

R65 Regulation allows an emergency vehicle to be equipped with two warning lights, or even more, synchronized in two groups.

Siren Sounds and Regulation

In Europe does not exist in a common regulation for sirens use on emergency vehicles.

Several regulations cover different sound pressure in dB, harmonic frequencies and sound patterns. FEDERAL SIGNAL VAMA has got different versions available, approved in all European countries, which accurately reproduce different required sounds.

The obtained signal is amplified by the speaker, in order to reach different sound pressures.

▶ **Non-regulated priority lights**

Nowadays, directional lights have been used to enhance other vehicle priority lights.

Some countries have regulations for this kind of lights, including blue colour, halogen, flashing strobe xenon or LEDs lights.

▶ **Traffic Signalling for stopped or slow vehicles**

As important as optical and acoustics of a vehicle, traffic signals for a perfect identification of stopped or slow vehicles became an important part of emergency warning lights.

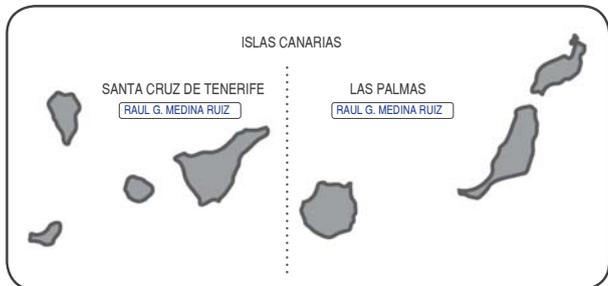
Blue lights help in this case, but rear-facing amber lights are more effective. These could be halogen, strobes, LED lights or directional warning lights (SignalMaster).

▶ **Other supplemental warning lights**

According to their different functions, emergency vehicles could use auxiliary lights to make emergency situations more comfortable, safe and effective.

These lights emit white light whose beam could be concentrated or diffused. According to their function, they can be safety lights, work lights, side lights, etc.







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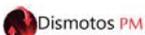
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