



LA SEMAFORICA

TRAFFIC LIGHTS





LA SEMAFORICA srl
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GIOTTO

Aluminium Traffic Light

Following with its tradition of continuous development of innovative products, fully compliant with the specifications of the most demanding markets, La Semaforica is proud to introduce its new Giotto signal head. Giotto is the first slim aluminium body signal head entirely made in Italy.

Giotto is available with 200 and 300 mm lenses and due to its thin and harmonic lines, coupled with a robust and durable frame, it blends in any urban context, giving a sense of refinement and elegance.



CONSTRUCTION FEATURES

- Giotto has a modern and innovative design with thin lines with no rough edges. Its thin body reduces the aesthetic impact of the signal
- Full CE marking in accordance to EN12368:2006 with both coloured and neutral lenses
- Available with three different power sources each with normal and dimmerable function
- The maximum thickness of the signal head with 200 mm lenses is 110mm (which becomes 140 considering the lens itself. For the 300 mm, the thickness is 130 mm (177 including the lens)
- The body is an extruded aluminium profile, polished and treated. A metal bar holds the polycarbonate doors, each equipped with two spring locking points. The signal head is also equipped with two aluminium fixing brackets, fixed to the body with stainless steel screws
- Giotto is the unique aluminium body signal head equipped with individually openable doors that swing 90° with two locking points
- Equipped with optical LED IP65 monoblock series STARLED2 that guarantee maximum brightness and reliability combined with a high energy saving
- The hoods are attached to the body with three pressure locks and can be installed both vertically and horizontally
- The mounting brackets are also made of aluminium and feature a rotation preventing system. They are available in two lengths, 180 and 90 mm. They can be fixed both with screws and Band-it
- Simple to install both vertically and horizontally
- Vandal proof construction
- The body and the brackets are both painted with a paint resistant to environmental agent. The signal head is available in the following standard colours:

Black (RAL 9005)
Green (RAL 6009)
Gray (RAL 7035)

Other colours are available on request according to customer's choice

- Giotto can be installed with only the bottom bracket, with the top part of the body closed, without the mounting point of the bracket
- Masks with every symbol available
- Easy to maintain
- Degree of protection IP55
- Available with backing boards according to Italian and foreign rules
- A class II system of internal wiring
- Giotto is customizable on the bottom part of the body with a coloured metal plate engraved with the name and logo of the city of installation.

TECHNICAL FEATURES

Material	Aluminium Bayer® Makrolon® UV-stabilized polycarbonate
Impact Resistance	Acc.to EN60598-1 Class IR3 Acc. to EN12368:2006
IP rating	IP55 Acc. to EN60529 Class IV Acc. to EN12368:2006
Standard Colours	Black (RAL 9005) Green (RAL 6009) Gray (RAL 7035) Yellow Orange Other colours or combination front-backside available on request
Diameters	200mm 300mm
Optic	200mm and 300mm Starled2 Modules
Temperature range	-40°C +60°C Acc. to EN60068-2-1-14 Class A,B,C Acc. to EN12368:2006
Vibration resistance	Acc. to EN60068-2-64
Damp heat resistance	Acc. to EN60068-2-30
Signal light with symbol	Class S1
Background screen of signal light	Class C1

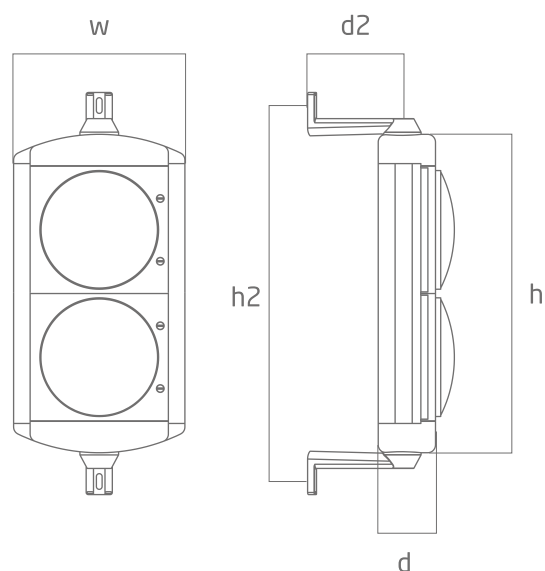
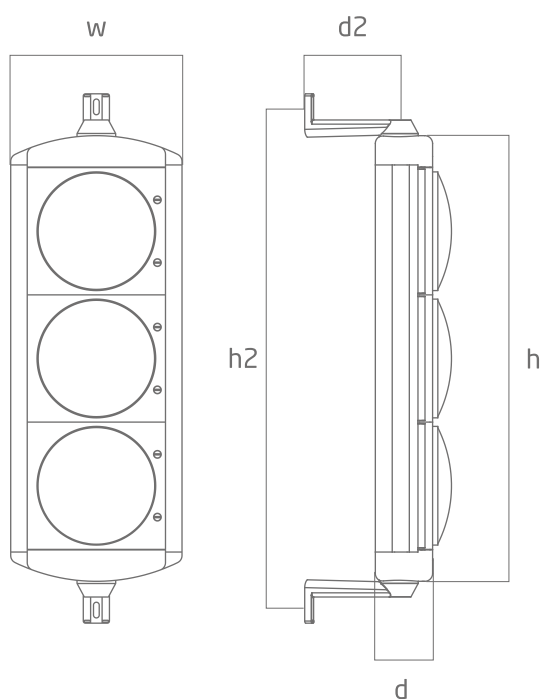
ENERGY SAVING

TRAFFIC SIGNAL HEAD	Ø 200 mm	yearly consumption	Ø 300 mm	yearly consumption
Consumption with incandescent lamps	70 W	613 kW/h	100W	876 kW/h
Consumption with Leds	8 W	70 kW/h	8 W	70 kW/h
Energy saving		88,5%		92%





DIMENSIONAL DRAWINGS



Lens Diameter	Number of Aspects	w	h	h2	d	d2	weight Kg
200mm	1	327,6	362	473,5 ±10	109,5	184 / 110	4,8
	2		605	717 ±10			7
	3		850,6	962 ±10			10,2
300mm	1	432,8	464,8	575 ±10	130,5		9,3
	2		968	918 ±10			12,4
	3		1152	1262 ±10			18,6

All the dimensions are in mm.

TOTEM GIOTTO

Aluminium Totem Traffic Lights



DESCRIPTION

Thanks to the continuous investment, development and looking for innovative products that meet the demands of the most demanding markets, LA SEMAFORICA developed THE TOTEM GIOTTO that represents a new concept of traffic lights achieved through a coated extruded aluminium column with an ultra slim and modern shape.

The traffic lights TOTEM is available in 3 LED aspects type "STARLED2" diameter 200 and 300 mm and can be upgraded with a fourth aspect allowing the integration with a repeater traffic light 3 aspects 100 mm diameter and the Countdown's devices.

Thanks to its tights and harmonious shape it fits perfectly in the urban environments TOTEM GIOTTO helps to give a sense of sophistication and elegance to your city, as well as thanks to its robust and durable housing.

KEY FEATURES

EQUIPMENT

- Shape made by a slim extruded aluminium profile
- Head made by cast aluminium
- External polycarbonate lenses
- Polycarbonate sunshade catchers with quick connections and fall-proof
- Opening doors with double spring locking point ideal for maintenance or for the use of symbol masks lights on the traffic lights aspects

VOLTAGE

- 230 Vac, 42 Vac, 48 Vac, 130 Vac, 10/36 V AC/DC on dimming versions 230Vac, 42Vac, 48Vac

FREQUENCY

- 50-60 Hz +/-10%

CONSUMPTION

- 8 W 200 and 300 mm about versions with standard voltage and 4 W with dimming
- 2 W versione 12 Vcc with low consumption by request

OPTICS

- LED optical module type STARLED2 with high luminosity with D.200 mm and D.300 mm
- LED optical module with fresnell lens with D.100 mm, D.200 mm, D.300 mm
- External optical lens colored or fumè to choose

APPROACHABILITY

- Opening doors with double spring locking point ideal for maintenance or for the use of symbol masks lights on the traffic lights aspects
- Frontal door can be opened for cabling (made with spring terminals can be tightened without screwdriver and totally in insulation class II), inspection, maintenance and to fix the rotation system

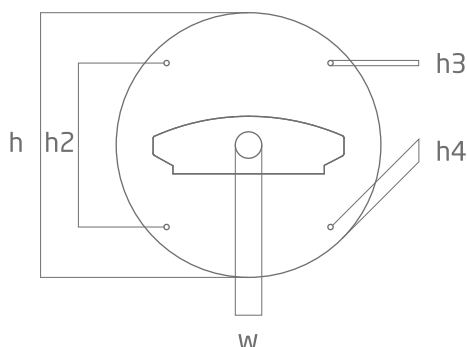
INSTALLATION AND POSITIONING

- Fixing to the ground by the base plate and No. 4 anchor bolts (possible mounting on pre-existing concrete blocks through dowels with chemical product) with orientation system up to 360 ° and rotation lock reaching the required position.
- Wheelbase 400x400 mm TOTEM diameter 200
- Wheelbase 600x600 mm TOTEM diameter 300

FOUNDATION BLOCK SIZE

- To achieve with concrete dosed at 350 kg/m³
- Approximate Dimensions to be verified by structural calculation and target area:

Depth 700 mm
Length 500 mm
Width 500 mm



RESISTANCE TO IMPACT AND VIBRATION

- VIBRATION in compliance to the EN 12368
- IMPACT resistance index IR3

PROTECTION

- Housing IP44
- Led module STARLED2 IP65

ENVIRONMENT CLASS

- Class A,B and C , from -40 up to + 60°C

ELECTROMAGNETIC COMPATIBILITY

- In compliance to the EN50293

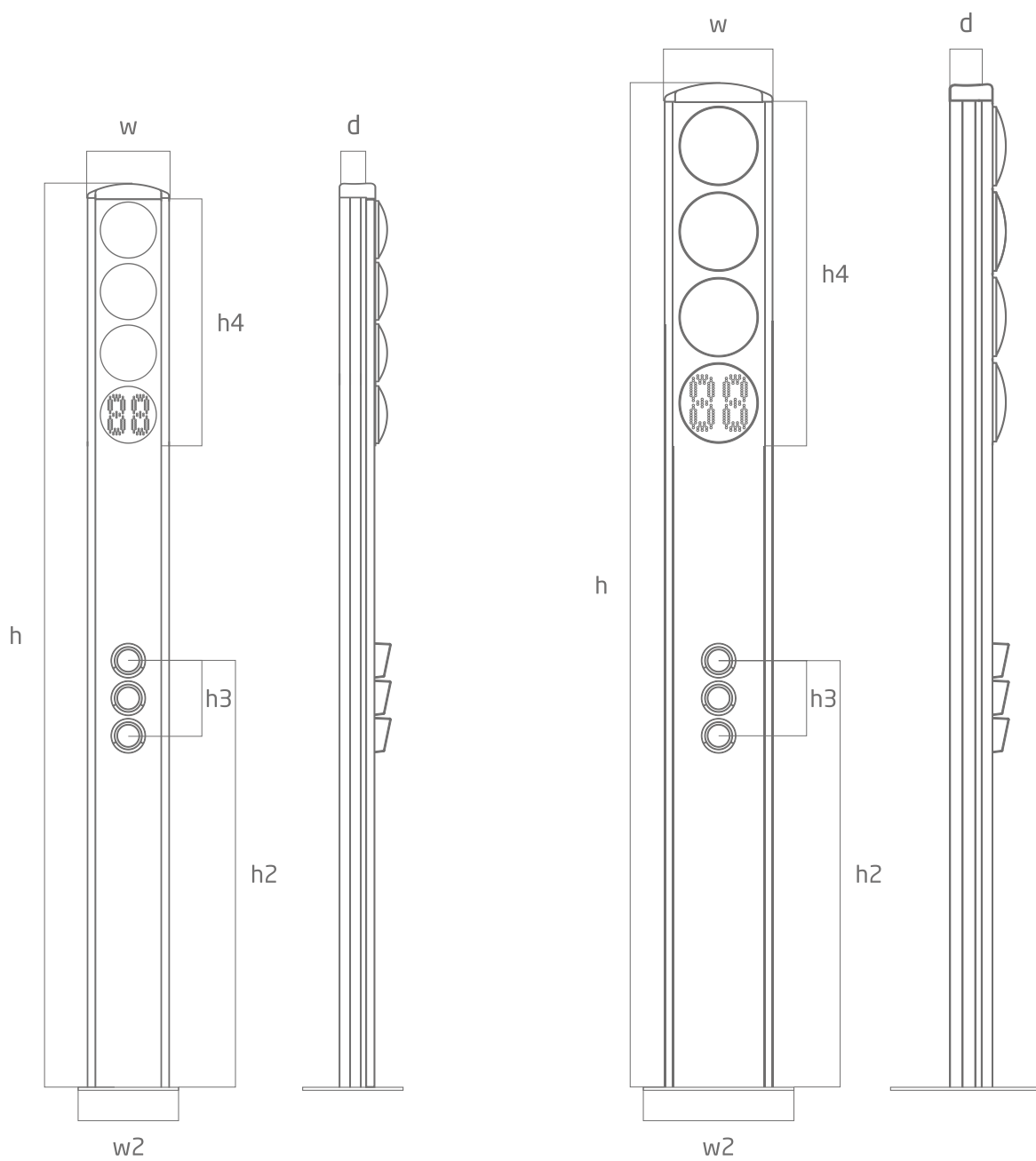
HOW TO GET AN ORDER

TOTEMGT(X)(Y)(Z)(W)(K) vehicular traffic lights totem
TOTEMGTP(X)(Y)(W)(K) pedestrian traffic lights totem
X= 1 DIAMETER 200 2 DIAMETER 300
Y= DUE TO THE DIAMETER 200 MM 1 WITH COUNTDOWN 2 DIGITS RED/AMBER/GREEN LEDS
2 WITH COUNTDOWN 2 DIGITS AMBER LED
Z= 1 COMPLETE WITH THE REPEATER TRAFFIC LIGHTS 3 ASPECTS D.100 MM
W= 1 230 Vac, 2 230 Vac with dimmer, 3 42 Vac, 4 42Vac with dimmer, 5 48 Vac, 6 48 Vac with dimmer, 7 130 Vac, 8 10/36 V AC/DC
K= COLOR OF THE TOTEM, WRITE THE RAL CODE



Diameter	h	h2	h3	h4	w
200mm	400	247,5	12	25	60
300mm	600	371,65	12	25	60

All the dimensions are in mm.



Diameter	w	w2	h	h2	h3	h4	d	Weight in Kg
200mm	327,6	400	3600	1700	290	980	109,5	>40
300mm	432,8	600	4000	1700	290	1327	130,5	>50

All the dimensions are in mm.

GT100

Aluminium repeater traffic lights series Giotto diam.100 mm



DESCRIPTION

LA SEMAFORICA domestic market leader about the development and manufacture of traffic lights for signalisation, introduce GT100 upon completion of the aluminium traffic lights GIOTTO's series.

GT100 is available as a repeater traffic lights for vehicular signalisation on the junctions and as well as on bike lanes and on public and private parking.

BENEFITS

- Robust and durable
- Easy to install and user friendly
- Slim design
- Low power consumption and high luminosity performance thanks to its led optics started100
- Widespread light with the fresnell lens
- Available all the symbols upon request
- Installation on both vertical and horizontal position
- Colors customizable upon request and adhesive brand label as well
- Maintenance-free thanks to its led technology

KEY FEATURES

EQUIPMENT

- Shape made by a slim extruded aluminium profile
- Head made by cast aluminium
- External polycarbonate lenses cast on the polycarbonate frontal doors
- Polycarbonate sunshade catchers
- Opening doors with four screws locking point

DIAMETER

- 100 mm 1,2,3 standards aspects, and with 4 or more aspects upon request

OPTICS

- LED optical module with fresnell lens with D.100 mm STARLED type
- External neutral lens

VOLTAGE

- 230 Vac and 12 VDC in the same led optic

FREQUENCY

- 50-60 Hz + / -10%

CONSUMPTION

- 4 W

APPROACHABILITY

- Openable Frontal doors with four screw locking points
- Cabling made with spring terminals can be tightened without screwdriver and totally in insulation class II

RESISTANCE TO IMPACT AND VIBRATION

- VIBRATION in compliance to the EN 12368
- IMPACT resistance index IR3 in compliance to the EN 60598-1

PROTECTION

- Housing IP44
- Led Module STARLED IP54 comply to the EN60529

ENVIRONMENT CLASS

- Class A,B and C , from -40 up to + 60°C

INSTALLATION

- Through aluminium standard brackets with length of (90 mm) or (180 mm) upon request
- Available with the top and bottom blind head upon request to fixing it on the housing with screws

COLORS

- Standard grey RAL 7035 and black RAL 9005 other colors upon request

HOW TO GET AN ORDER

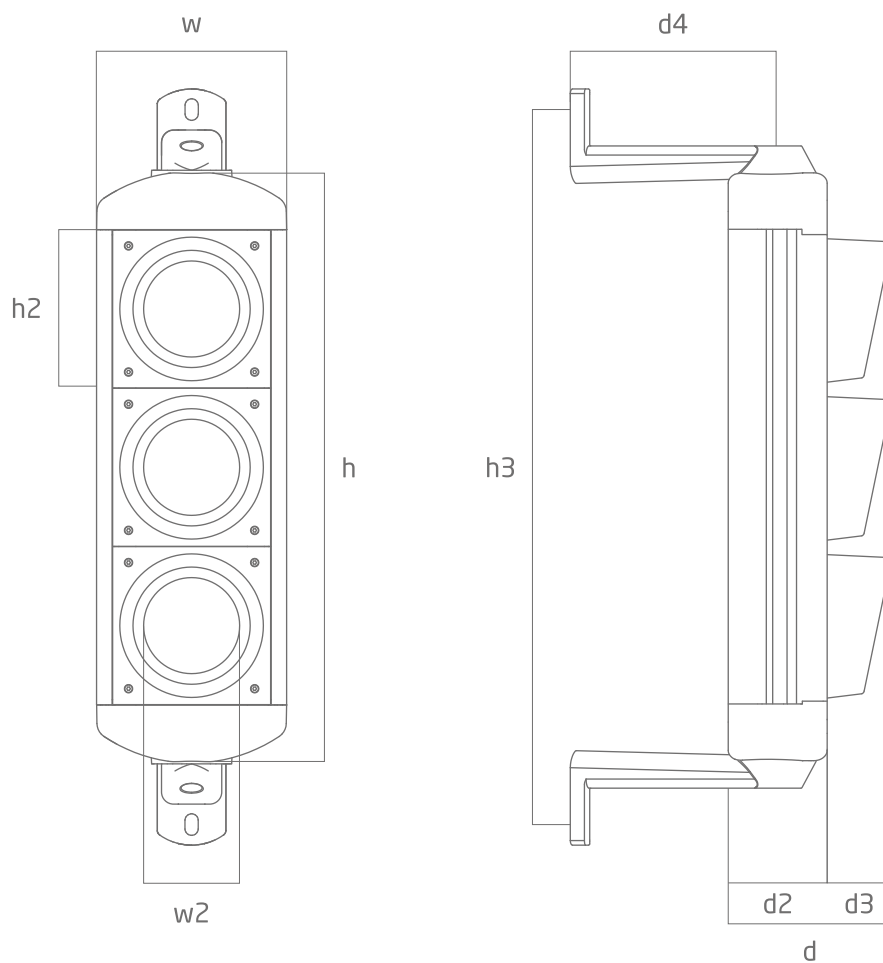
GT100(X)(Y)(Z)

X= 1 with one aspect 2 with two aspects 3 with three aspects

Y= COLOR , WRITE THE RAL CODE

Z= standard version with short brackets 1 version with the longer brackets





Number of Aspects	w	w2	h	h2	h3	d	d2	d3	d4	Weight in kg
1	180	90	302	150	400	155	95	60	184/110	3,4
2			407		545					4,6
3			557		690					5,8

All the dimensions are in mm.

GALILEO

Environment-friendly traffic light with an innovative design



LA SEMAFORICA, a company with over 65 years of experience in the construction of traffic-lights, presents a new revolutionary product : GALILEO.

The innovative design, the compact and modern shape, the environmental friendliness, obtained by using an exclusive low power Led lighting source, make GALILEO the traffic light of the twenty first century.

GENERAL CHARACTERISTICS

GALILEO is a contemporary, stylish and slim traffic light. It has a CE certification according to EN12368:2006 and offers the following benefits:

- ECO compatible, it respects the environments by reducing the emission of CO₂, derived from electricity production
- Slim and modern design, it is ideal to use it in historical city and town centers
- Use of STARLED2 optic as light source
- Available in diameter 200 and 300 mm, modular & hybrid version, with red aspect of 300 mm, yellow and green of 200 mm.
- Strong and durable, it's produced with first choice polycarbonate
- Can be recycled in an environmentally
- Not accessible by unauthorized operators, but also designed to simplify and reduce maintenance
- Available in standard colours: black, green and other colours
- Horizontal and vertical installation with catchers sunshades
- CVE previous model traffic light attacks available, also the accessories such as contrast panels and mask with all symbols
- Available two types of coupled rings to choose two different views
- Weight reduced by 20% compared to others traffic lights in market
- Better security and visibility with operating costs reduced by 90%, compared to traditional traffic light with incandescent lamp

CONSTRUCTION FEATURES

Developed following the idea of turning traffic lights in an innovative product, Galileo has smooth curves reminding the perfect circles of the compass invented by Galileo Galilei. By using only LEDs, Galileo is not only the most revolutionary Italian traffic light, but it's also environmentally friendly.

Galileo is available in two configurations, depending on the customer's preferred style. By changing the coupling ring between the modules, it can have either a traditional style or a new shape where the three modules seems to be independent.

From a more technical point of view, Galileo has quick graft doors, opening to 180° for easier access, two latch-point, with a system that allows only trained technicians to open it, lenses moulded with doors.

The visor hood connect quickly with four anti-accidental fall fixing points.

Galileo can be turned and installed in horizontal position.

Modular support fastening, on pole diameter 102 mm, upper, lower or equal, with anti-rotation system, usable and compatible with the majority of other supports, supplied by other manufacturers.

The same fastening (fixing brackets B/U) can be set, with band-it metal clamps.

Available on request, fastening for overhead pole or special attacks.

ADVANTAGES

This innovative traffic light with LED optical system offers several benefits compared to traditional solution with incandescent bulbs. The main advantages are:

- Reduction of maintenance costs thanks to:

Consumption reduced of 90%

No need of maintenance or lamp change

Higher lifetime (about 10 years)

- higher safety thanks to the reduction of phantom effect, which is the cause of false signals due to sun rays reflection
- Also available all the directional masks and other symbols



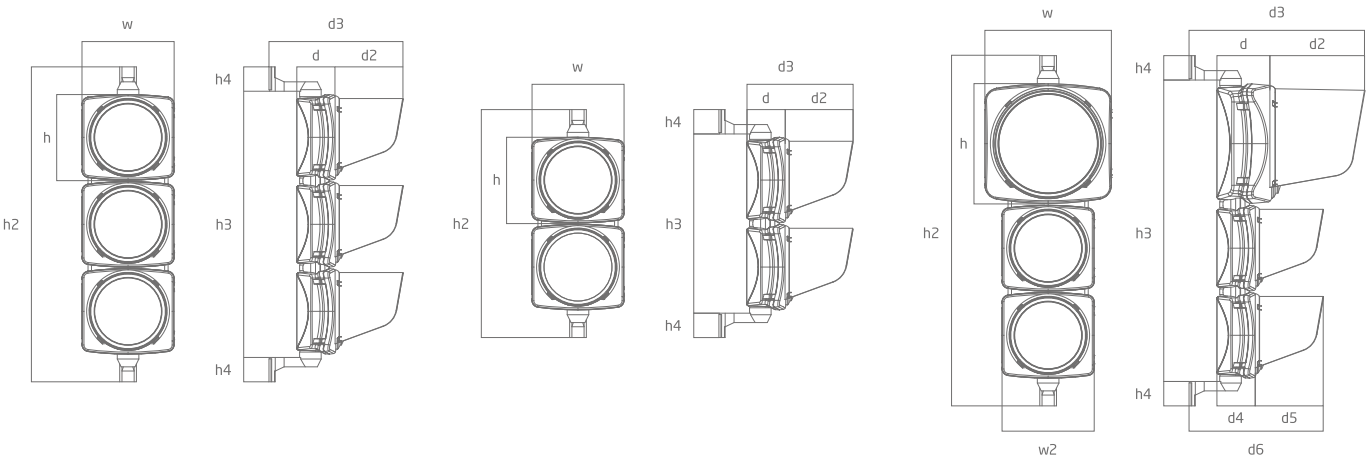
TECHNICAL FEATURES

Material	Bayer® Makrolon® UV-stabilized polycarbonate
Impact Resistance	Acc.to EN60598-1 Class IR3 Acc. to EN12368:2006
IP rating	IP55 Acc. to EN60529 Class IV Acc. to EN12368:2006
Standard Colours	Black Green Gray Yellow Orange Other colours or combination front-backside available on request
Diameters	200mm 300mm 200mm and 300mm can be coupled
Optic	200mm and 300mm Starled2 Modules
Temperature range	-40°C +60°C Acc. to EN60068-2-1-14 Class A,B,C Acc. to EN12368:2006
Vibration resistance	Acc. to EN60068-2-64
Damp heat resistance	Acc. to EN60068-2-30
Signal light with symbol	Class S1
Background screen of signal light	Class C1

ENERGY SAVING

TRAFFIC SIGNAL HEAD	Ø 200 mm	yearly consumption	Ø 300 mm	yearly consumption
Consumption with incandenscent lamps	70 W	613 kW/h	100W	876 kW/h
Consumption with Leds	8 W	70 kW/h	8 W	70 kW/h
Energy saving		88,5%		92%

DIMENSIONAL DRAWINGS



Lens Diameter	Number of Aspects	w	w2	h	h2	h3	h4	d	d2	d3	d4	d5	d6
200mm	1	265	/	246	405	262	70	110	196	386	/	/	/
	2				655	560							
	3				905	750							
300mm	1	363	/	346	503	365	70	152	273	505	/	/	/
	2				855	715							
	3				1205	1065							
300mm 200mm 200mm	3	363	265	346	1005	865	70	152	273	505	110	196	386

All the dimensions are in mm.



CVE-LED Series

Polycarbonate traffic light with LED optics



Italian Government approval n. 30014 of the 24/03/2009 and CE certification EN12368:2006 obtained from a qualified laboratory.

GENERAL CHARACTERISTICS

The new energy saving technology has the following principal features:

- Improved visibility over the traditional bulbs and therefore improved safety for road transports
- Reduced consumption, up to 90% less than the traditional bulbs
- Longer lifetime. About 20 times longer than the traditional bulbs (10 years) > 100.000 hours
- Maintenance free
- Ease to install in place of the bulbs without replacing the whole signal head

CONSTRUCTION FEATURES

The CVE-LED signal head is a modular system of stackable elements Ø 210 mm and 300 mm.

Rapid insertion doors with two locking points that prevent it from accidentally fall. The doors can open/rotate 90°. The lenses are molded with the doors.

Quick insertion sun visor. Different locking position allow the signal head to be mounted both horizontally and vertically. Brackets for modular supports for Ø 102 mm poles. They can be used with Band-It and, upon request, can be provided with adapters for flat surfaces.

Upon request, the signal head can be provided with holders for overhead poles or wires.

Waterproof electrical connections with a terminal box in the body of the signal head.

MATERIAL

Polycarbonate with an elevated mechanical strength, colored at the origin in paste, UV stabilised, autoextinguishing. Available in the standard colors: green, yellow and black. Upon request it can be produced in other colors, like gray, or in a combination of colors, like gray/black.

LED MODULES

Traffic lights LED module with 4 high luminosity and efficiency Rebel LEDs. The module is self contained and the housing has a protection degree IP55. It includes the electronic driver (12Vdc ÷ 24Vdc or 230Vac ÷ 48 Vac with or without the dimming function to reduce the luminosity at night) and a double lens: Fresnel lens to widen the beam and external lens to stabilise the optics. The external lens can be colored in paste or have a neutral color.

The external lens is molded with the door of the signal head and the LED module can be lock screwed on it, making it easy to maintain or to insert arrows or other symbols.

Plastic masks with an anti-rotation system and all the symbols used in Italy are available, other can be produced upon request.

ADVANTAGES

LEDs signal heads have several advantages over the traditional ones with incandescent bulbs. The main advantages are:

- Reduced costs, due to the reduced consumption and the absence of maintenance
- longer lifetime (about 10 years)
- Increased safety due to the reduced phantom effect
- Available with all the arrow and symbols used in Italy and different ones upon request



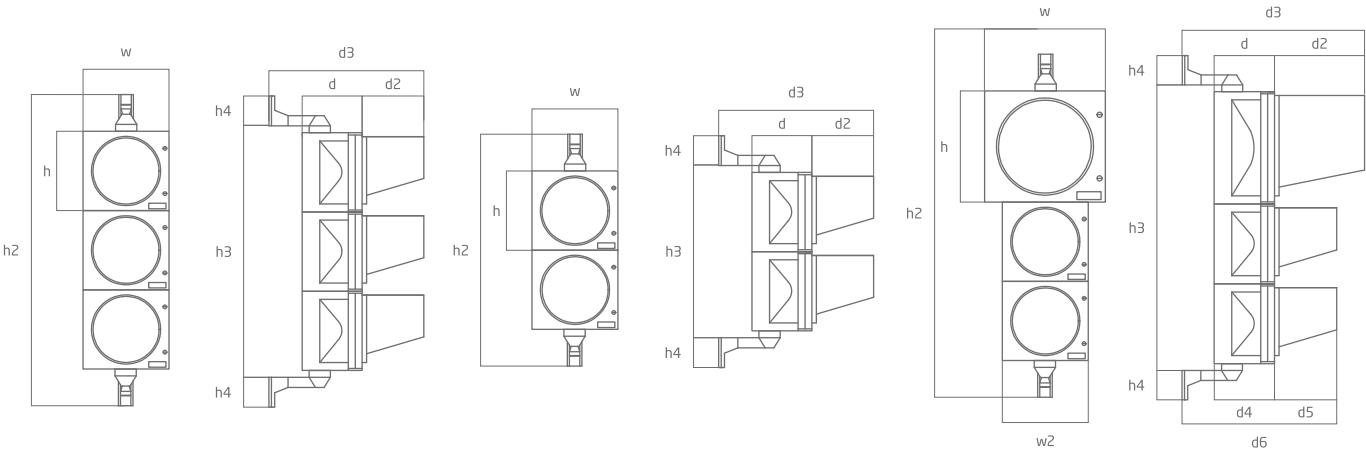
TECHNICAL FEATURES

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Impact Resistance	Acc.to EN60598-1 Class IR3 Acc. to EN12368:2006
IP rating	IP55 Acc. to EN60529 Class IV Acc. to EN12368:2006
Standard Colours	Black Green Gray Yellow Orange Other colours or combination front-backside available on request
Diameters	200mm 300mm 200mm and 300mm can be coupled
Optic	200mm and 300mm Starled2 Modules
Temperature range	-40°C +60°C Acc. to EN60068-2-1-14 Class A,B,C Acc. to EN12368:2006
Vibration resistance	Acc. to EN60068-2-64
Damp heat resistance	Acc. to EN60068-2-30
Signal light with symbol	Class S1
Background screen of signal light	Class C1

ENERGY SAVING

TRAFFIC SIGNAL HEAD	Ø 200 mm	yearly consumption	Ø 300 mm	yearly consumption
Consumption with incandenscent lamps	70 W	613 kW/h	100W	876 kW/h
Consumption with Leds	8 W	70 kW/h	8 W	70 kW/h
Energy saving		88,5%		92%

DIMENSIONAL DRAWINGS



Lens Diameter	Number of Aspects	w	w2	h	h2	h3	h4	d	d2	d3	d4	d5	d6
200mm	1	265	/	245	385	245	70	185	195	445	/	/	/
	2				640	500							
	3				883	743							
300mm	1	365	/	345	495	355	70	185	275	525	/	/	/
	2				845	705							
	3				1185	1045							
300mm 200mm 200mm	3	365	265	345	983	843	70	185	275	525	185	195	445

All the dimensions are in mm.



Serie RS

LED repeater traffic lights diameter 100mm



GENERAL CHARACTERISTICS

Our series of small polycarbonate signal heads "RS" offers the following advantages:

- An elegant design
- High luminosity and excellent visibility
- Ease of replacing the traditional bulbs with LED modules
- Light and easy to install
- Resistant to all the worst atmospheric agents
- Ideal for use in parings, private gates and industrial signals

CONSTRUCTION FEATURES

Modular, with stackable elements

Rapid insertion doors with four locking screws on the front

Polycarbonate lens colored in paste (there are two different lenses available, depending on whether the light source is LED or bulbs)

Sun visor molded with the door. It can be fixed to the signal head horizontally for special applications (for example, advertising signs)

Brackets for modular supports for Ø 102 mm poles. They can be used with Band-It and, upon request, can be provided with adapters for flat surfaces

Protection grade IP55

Operating temperature, according to EN12368 class A, B, C -40°C - +60°C

Isolation Class II

Weight 1.5 Kg (for the three modules and the B/U brackets)

Size of a single module: 150x150x175mm

MATERIAL

Polycarbonate with an elevated mechanical strength, colored at the origin in paste, UV stabilised, autoextinguishing.
Available in the standard colors: green and black. Upon request it can be produced in other colors, like yellow.

LED OPTICS

The double Fresnel lens used for the LED optics is different from that for the bulbs and is molded with the door.

Double supply, standard, 230 Vac $\pm 15\%$ 12 Vcc $\pm 10\%$, within the module

Power consumption of each module (red, amber, green): 3W

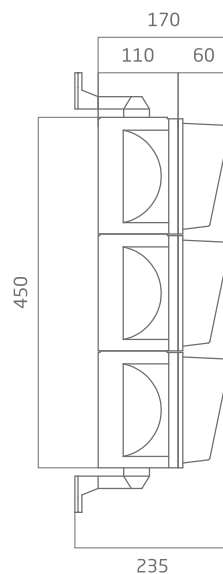
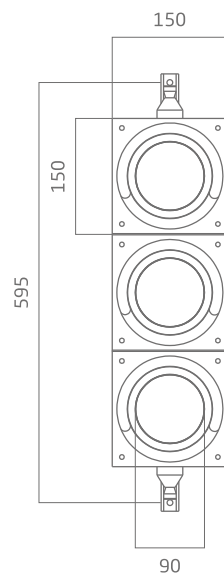
Electrical connections with terminated silicon rubber coated unipolar wires. 1.5mm² section and one wire for each socket plus the common contact (it is also available a connection for the 12Vcc, replacing the standard one)

Chromatic coordinates Red (625 ± 5 nm) Amber (592 ± 3 nm)

Green (505 ± 5 nm)

Compliant with EN12368:2006

Intensity > 200 CD



All the dimensions are in mm.

CD

“Countdown” Traffic lights



GENERAL CHARACTERISTICS

- High brightness thanks to Led optical system
- Strong and reliable, inserted in traffic lights modules diam. 200 and 300 mm
- Easy to install
- Microprocessor based
- Self-learning of times to be displayed with connection in parallel to the traffic lights; it can be used as a display for figures with communication through serial port
- Red and green or Amber in the same device
- Useful to avoid false starts of drivers, reducing the risk of car accidents
- It gives an important information on remaining time when used on pedestrian crossings controlled by traffic lights

DESCRIPTION OF FUNCTIONING

Countdown traffic lights is an easy and effective device at the same time. Drivers approaching a junction controlled by traffic lights can immediately have the information of the phase in progress on their lane, as the module displays the remaining time of green light, and subsequently the amber and red light for stop.

The application of countdown modules is very easy: their connection is done in parallel to the linked vehicular or pedestrian traffic lights. For this reason it does not need special programming or connections to the traffic controller.

For functioning as a display the countdown is provided with a serial port for direct communication with the controller.

The first cycle of self-learning allows the countdown electronic to learn and record vehicular or pedestrian times, and it will start counting from the second cycle.

The best application of these devices is on traffic junctions with fixed times or on systems with dynamic plan generation, but not on lanes with programs that foresee the cancellation or the extension of traffic phases.

In these junctions it is anyway possible to use countdowns, without giving information on variable times.

During the self-learning mode it is possible to choose the display layout to be shown among 7 different types, according to the colour sequence of the traffic lights to be connected with the countdown.

Preset 7 layouts and up to 14 different display combinations. In this way the CD Modules can be linked to traffic lights of any type, sequence and generation, without changing the functionality of the junction itself.

TECHNICAL FEATURES

1	Model	5 Different Aspects available CD200 mono - CD200 bicolor h char 125mm CD300 2 digit bicolor CD300 2 ½ digit bicolor square or round h char 175-180mm
2	Dimensions	200mm and 300mm
3	Led Status check	Each segment consists of two branches of LEDs
4	Automatic regulation of luminosity	With internal sensor
5	Number of leds	256 CD300 2 ½ digits 216 CD300 2 digits 184 CD200 bicolor 68 CD200 monocolor
6	Led type	High Flux
7	Reading distance	diam.200mm 60 m diam.300mm 100 m
8	Colours	Red, Amber and Green ref. EN12368:2006
9	Power supply	150 - 265 Vac, 47-63Hz
10	Power consumption	3-12 W
11	Operative temperature	- 40°C + 70°C Class A, B, C Ref. EN12368:2006
12	Protection degree	IP65 Acc. to EN 60598
13	EMC	ref. EN50293

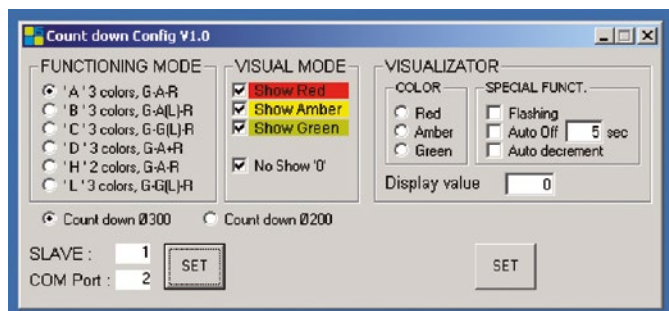
Through a simple and intuitive software program, that can be installed on any PC, it will be possible to set the desired display mode and it will be possible to change it at any time. This means that CD is a flexible product able to meet any requirement.

CODE CD200 Countdown optics single block diameter 200mm complete with no. 3 fixing hooks and no. 1 EPDM moulded gasket.

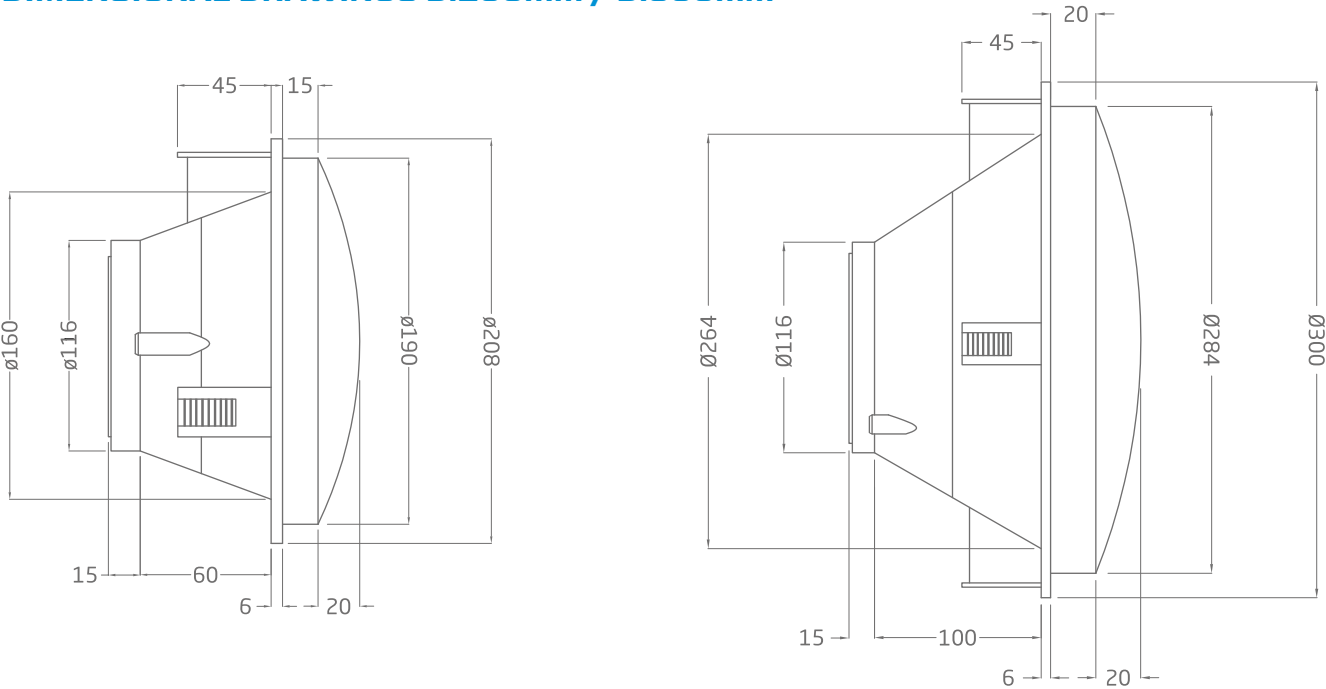
CODE CD300 Countdown optics single block diameter 300 mm complete with no. 4 fixing hooks and no. 1 EPDM moulded gasket.

The CD can also be used as a standard display of information. In this case the countdown becomes a normal Led display that can receive orders from any device provided with serial port RS232, through a simple communication protocol.

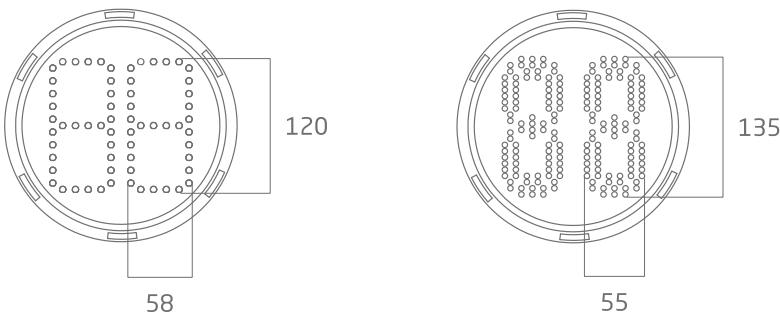
The mechanics of the countdown module is formed by a single block optics IP65 moulded in shockproof polycarbonate and a series of slides with pressure clips. In this way, it is possible to install the module inside any traffic lights case or on any vertical sign in few minutes.



DIMENSIONAL DRAWINGS D.200mm / D.300mm

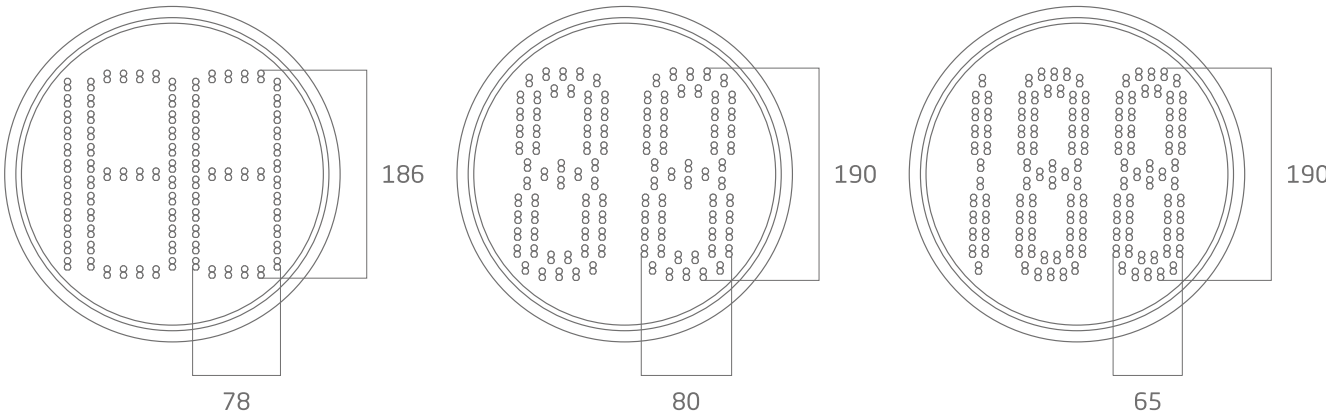


MODULES AVAILABLE D.200mm



- Mono Version
- Bicolor Version

MODULES AVAILABLE D.300mm

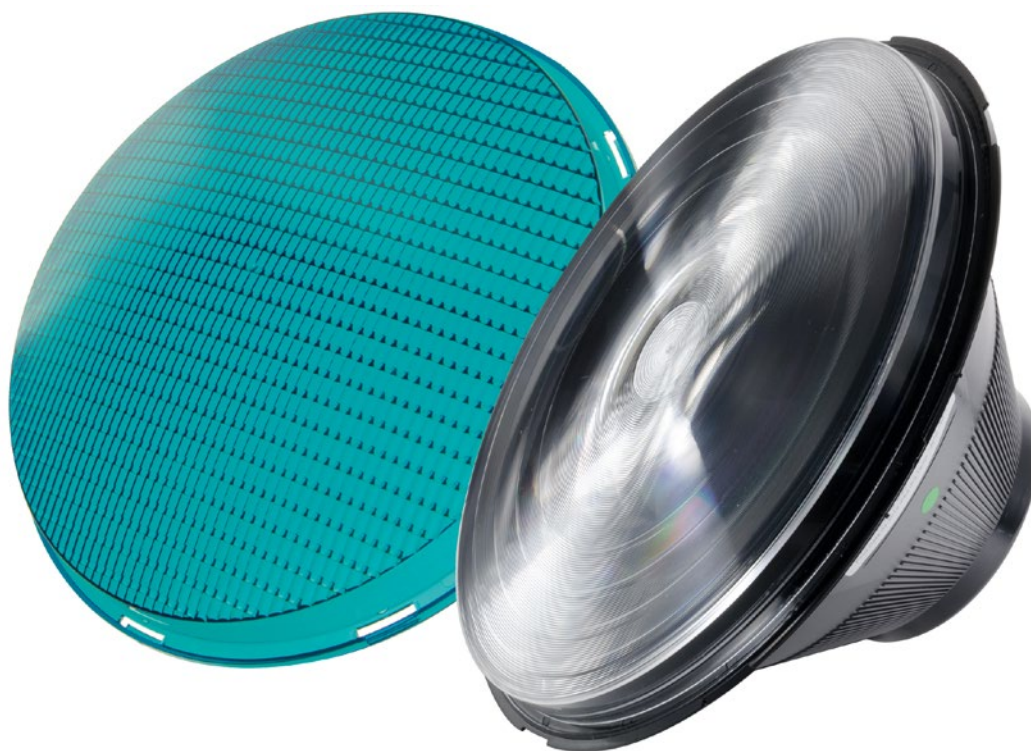


- Bicolor 2 ½ Digits square version
- Bicolor 2 Digits round version
- Bicolor 2 ½ Digits round version

All the dimensions are in mm.

STARLED2

Led Modules for next generation traffic lights



Our history of over 70 years of experience allowed us to realize one of the most innovative solutions for traffic lights lighting based on LED technology.

An electronic control driver runs a central luminous source generated from High Flux LED that thanks to the dual lens system allows to obtain a plain bright light.

Reliable, technologically advanced, easy to install and built in compliance with EN12368:2006, today the line of led optics for traffic lights STARLED2 is on the market as a response to the ever-increasing demands to reduce consumption and environmental respect.

Different power sources available to provide solutions in step with new applications such as photovoltaic panels, extra low voltage for safety applications, etc.

ADVANTAGES

- Vision of the light evenly distributed throughout the lens without Pin effect
- Low power consumption with high light output
- Reduction of ghost effect at the lowest levels provided by EN12368:2006
- Average life more than 10 years
- Available with white tinted lenses and to white for tram signals
- Quick connection system with sliding guides, 3 for diameter 200 mm and 4 for the 300 mm supplied with sealing gasket
- Opening of the simplified module with screwed lens and fresnell internal screw with clutch pressure
- Available all symbol masks and on request custom versions
- Highest luminance uniformity level
- No phantom effect
- Neutral lens (Not coloured) available

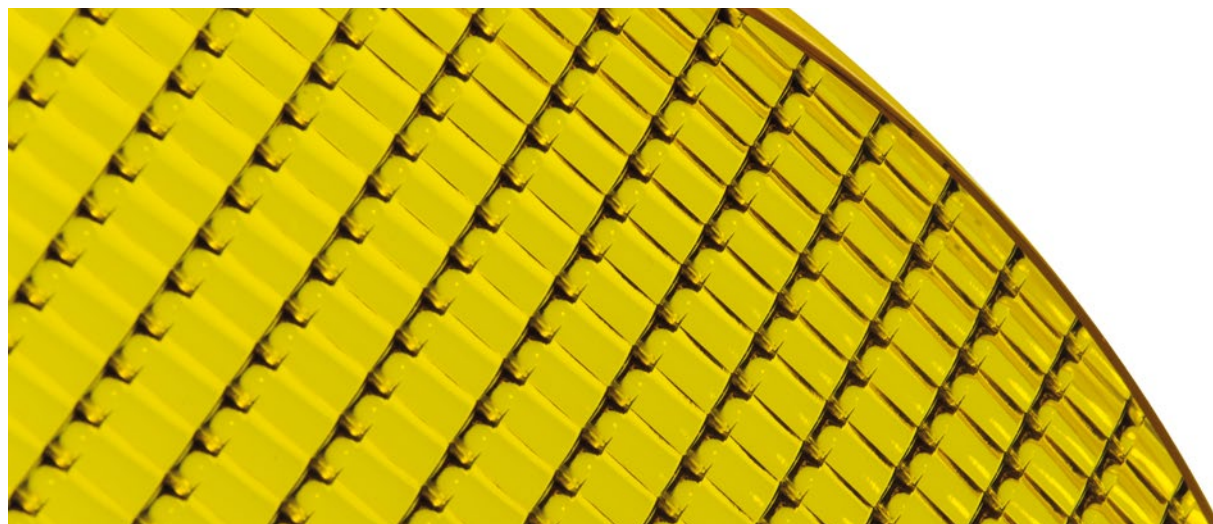
STARLED2 TECHNICAL DETAILS 230V AC - Type E CLC/TS 50509

DIAMETER	Ø210 mm	Ø300 mm
Luminous intensity acc. to EN12368:2006	red > 400cd amber > 400cd green > 400cd	red > 400cd amber > 400cd green > 400cd
Optical performance acc. to EN12368:2006	B3/2W B2/2 W B3/2N B2/2 N	B2/2 W B2/2 N
Colorimetry	acc. to EN12368:2006	
Uniformity acc. to EN12368:2006	better than 1:2,5	
LED type	high flux	
Phantom light class	Class 5	
PF	>0,95	
Operating voltage	196 - 265 V / 160 V - 190 V (with dimmer function the output light is reduced of about 50% of normal level)	
Frequency	50 Hz ± 20%	
Power consumption	red 8/4W amber 8/4 W green 8/4 W white 8/4 W	
EMC	acc. to EN50293	
Cable	2 x 0,75 mm ² ; 1 m length	
Ambient Temperature range acc. to EN12368:2006	class A, B, C -40° C +60°C	
Protection class	protection class II acc. to EN60598	
Protection degree	IP 65 acc. to EN60598	
Impact resistance	class IR3 acc. to EN60598-1	
Material of lens and housing	UV stabilized polycarbonate	
Weight	0,5 Kg	1,0 Kg
Dimensions (frontal lens included)	Ø 208 x 116 mm	Ø 300 x 161 mm



STARLED2 TECHNICAL DETAILS 42V AC - Type C CLC/TS 50509

DIAMETER	Ø210 mm	Ø300 mm
Luminous intensity acc. to EN12368:2006	red > 400cd amber > 400cd green > 400cd	red > 400cd amber > 400cd green > 400cd
Optical performance acc. to EN12368:2006	B3/2W B2/2 W B3/2N B2/2 N	B2/2 W B2/2 N
Colorimetry	acc. to EN12368:2006	
Uniformity acc. to EN12368:2006	better than 1:2,5	
LED type	high flux	
Phantom light class	Class 5	
PF	>0,96	
Operating voltage	31-51Vac / 18-29 Vac (with dimmer function the output light is reduced of about 50% of normal level)	
Frequency	50 Hz ± 20%	
Available standard	Astrin class II - OCIT	
Power consumption	red 7/4 W amber 7/4 W green 7/4 W white 7/4 W	
EMC	acc. to EN50293	
Cable	2 x 0,75 mm ² ; 1 m length	
Ambient Temperature range acc. to EN12368:2006	class A, B, C -40 +60° C	
Protection class	class II acc. to EN60598	
Protection degree	IP 65 acc. to EN60598	
Impact resistance	class IR3acc. to EN60598-1	
Material of lens and housing	UV stabilized polycarbonate	
Weight	0,5 Kg	1,0 Kg
Dimensions (frontal lens included)	Ø 208 x 116 mm	Ø 300 x 161 mm



STARLED2 TECHNICAL DETAILS 10/36V AC /DC

DIAMETER	Ø210 mm	Ø300 mm
Luminous intensity acc. to EN12368:2006	red > 400cd amber > 400cd green > 400cd	red > 400cd amber > 400cd green > 400cd
Optical performance acc. to EN12368:2006	B3/2W B2/2 W B3/2N B2/2 N	B2/2 W B2/2 N
Colorimetry	acc. to EN12368:2006	
Uniformity acc. to EN12368:2006	better than 1:2,5	
LED type	high flux	
Phantom light class	Class 5	
Operating voltage	10 - 36 V AC/DC	
Power consumption	red 5 W amber 5 W green 5 W white 5 W	
EMC	acc. to EN50293	
Cable	2 x 0,75 mm ² ; 1 m length	
Ambient Temperature range acc. to EN12368:2006	class A, B, C -40 +60° C	
Protection class	class II acc. to EN60598	
Protection degree	IP 65 acc. to EN60598	
Impact resistance	class IR3acc. to EN60598-1	
Material of lens and housing	UV stabilized polycarbonate	
Weight	0,5 Kg	1,0 Kg
Dimensions (frontal lens included)	Ø 208 x 116 mm	Ø 300 x 161 mm





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