

LIGHT & SAFETY 2024

### **D-Power catalog 2024**



Our catalog is printed on ecological paper, bleached without the use of chlorine, and the raw materials to produce it have been harvested and processed in a responsible manner, obtaining the FSC certification.

The **Detas Group** was founded in 1978 in the province of Brescia, Italy. However, its roots lie in the experience and professional knowledge that have been passed down from generation to generation since 1896, when the original company was founded in Pula, Istria.

**D-Power** is the division of Detas Group specialized in the production and engineering of traffic safety devices, introducing for more than twenty years the most advanced technologies to service the market.

### The range of products is mainly divided in **two categories**: safety devices for fixed installations and temporary warning lights for roadworks.

This catalog provides only a preview of our products. We invite our Customers to visit regularly our website **d-power.com** where they will have the opportunity to be updated about the latest news of our products.





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### **Traffic control equipment - Warning and safety light devices**

#### Scope and applications

This European Standard specifies the requirements for individual electrically operated light devices, called warning lights, emitting a continuous or regular intermittent light of a single colour which, by their colour and position alone, are used to warn, inform or guide road users. It specifies the requirements for visual, structural and operational performance and the relevant test methods to be used. This European Standard is not applicable to lighting devices, which convey messages by additional means (e.g. variable message signs) or which convey a mandatory instruction (e.g. traffic signals) or which are covered by vehicle lighting regulations. Below you will find a table with the most relevant classes of the norm that covers most of the applications, permanent or temporary, used in the European Union. In the next page we present a guide that can help choosing the proper LED light in different situations. This guide is not an official transposition of the norm but it is to be considered a recommendation based on our experience and the official transpositions of some countries of the European Union.

### Luminous intensity - Relevant classes

Class	Area of light emitting surface	Min. diameter of light emission	Range of angles		Luminous intensity (Day)		Luminous intensity (Night)
	[cm <sup>2</sup> ]	[mm]	Horizontal	Vertical	<b>Min.</b> [cd]	Max. [cd]	Dim to
L2H	≥18	48	+7°7°	+5°5°	150	1500	35 %
L6	≥2x250	178.5	+10°10°	+5°5°	10	100	35 %
L7	≥250	178.5	+10°10°	+5°5°	20	100	35 %
L8G	≥250	178.5	+7.5°7.5°	+5°5°	25	100	35 %
L8M	≥250	178.5	+7.5°7.5°	+5°5°	500	1500	35 %
L8H	≥250	178.5	+7.5°7.5°	+5°5°	1500	5000	35 %
L9M	≥700	298.6	+1.5°1.5°	+1.5°1.5°	2000	8000	35 %
L9H	≥700	298.6	+1.5°1.5°	+1.5°1.5°	20000	40000	35 %



FIXED applic	ations				0	Ô Ô Å					
50	Class	L8M L8H	L2H L8M	L2H	L8M L8H	L2H L8M	L2H L8M		L2H	L8M L8H	L8M L8H
Urban roads	LED light	Basic 200	Basic 102 Basic 201	Basic 102	Basic 201	Basic 200	Basic 200 Basic 201		RGR	Basic 200 Basic 201	Basic 201
<b>90 70</b>	Class	L8M L8H	L8M L8H	L8M L8H	L8M L8H	L8M L8H	L8M L8H	L8M L8H	L2H	L8M L8H	L8M L8H
Secondary roads	LED light	Basic 200	Basic 201	Basic 201	Basic 201	Basic 200	Basic 200 Basic 201	Basic 200 Basic 201	RGR	Basic 200 Basic 201	Basic 201
(130) (110) Main	Class	L9M L9H			L9M L9H	L9M L9H		L9M L9H	L2H		L9M L9H
roads and Motorways	LED light	Basic 302			Basic 304	Basic 302		Basic 302	RGR		Basic 304

TEMPORARY road work zo applications		2 2	في								
50	Class	L6 L7	L6 L7	L6 L7	L8H L8M	L8H L8M		L8H L8M			
Urban roads	LED light	D-Star	D-Star	D-Star	Basic 210	Basic 211		Basic 211			
90 70 Secondary	Class	L6 L7 L8G *	L6 L7 L8G/M *	L6 L7	L8H L8M	L8H L8M	L8H L8M	L8H L8M	2 x L9M 23 x L8H	2 x L9M 3 x L9H	L8H L8M
roads	LED light	D-Star	D-Star Basic 210	D-Star	Basic 210	Basic 211	Basic 210	Basic 211	Basic 211 Basic 304	Basic 304	Basic 210 Basic 211
(13) (11) Main	Class	L6 L7 L8G *	L6 L7 L8G/M *	L6 L7	L8H L8M	L8H L8M	L9M L9H	L8H L9M L9H	2 x L9M 23 x L8H	2 x L9M 3 x L9H	L8H L8M L9H L9M
roads and Motorways	LED light	D-Star	D-Star Basic 210	D-Star	Basic 210	Basic 211	Basic 302	Basic 211 Basic 304	Basic 211 Basic 304	Basic 304	Basic 210 Basic 211 Basic 304

\* only yellow



## LIGHTING AND SIGNALLING DESIGN OF PEDESTRIAN CROSSINGS

### SCOPE AND APPLICATION

This technical specification provides the guidelines to correctly design the lighting of pedestrian crossings on motor vehicle roads in application of EN13201.

#### **TERMS AND DEFINITIONS**

#### Waiting area

Limited area next to the traffic lanes where pedestrians stand before crossing. Typically the waiting area is a portion of the sidewalk.

#### **Crossing area**

Transversal portion of the road where pedestrians walk when crossing. This area is identified by the white stripes.

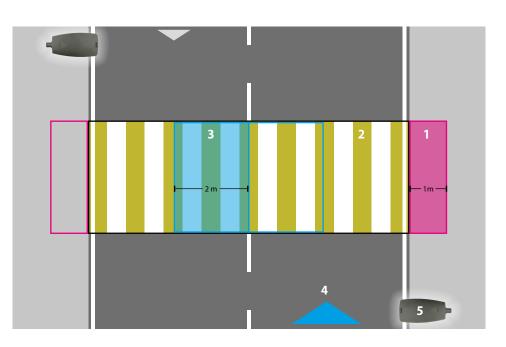
### **Transition zone**

Portion of the crossing area of two-way roads, located in the opposite travel direction lane, where a pedestrian that is already crossing the road must start to be visible to incoming traffic.

Road class (EN13201)	Lighting classes of the pedestrian crossings
M1	-
M2	<b>EV1</b> (50 lux min.)
M3	<b>EV2</b> (30 lux min.)
M4	<b>EV2</b> (30 lux min.)
M5	<b>EV3</b> (10 lux min.)
M6	<b>EV3</b> (10 lux min.)

The different areas for the travel direction are highlighted above:

- 1. waiting area
- 2. crossing area
- 3. transition zone
- 4. traffic lane
- 5. LED streetlight





### **CALCULATION GRID**

The calculation grid consists in a series of points along the transversal axis of the road passing through the center of the pedestrian crossing which have a constant distance not exceeding 1m, all points are on a plane at a height of 1m from the road level.

Four (4) additional points shall be placed at the edges of the measuring area, two (2) at the outer limits of the waiting area and two (2) at the outer limits of the transition zone.

All these points are measuring vertical illuminance and shall be oriented towards the incoming traffic.

The vertical illuminance measured on the whole axis of the crossing, shall be greater than the applicable EV class.

To ensure uniformity, the vertical illuminance measured on the four (4) points at the edges of the measuring area shall be 15% or greater than the applicable EV class.

### **MEASURING AREA**

### Two-way roads

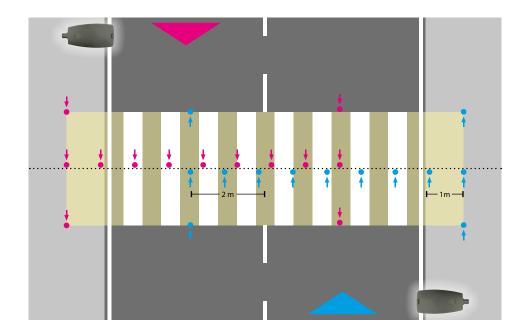
Starts from the outer limits of the waiting area and extends to the outer limits of the transition zone. One traffic direction is considered for evaluation.

### **One-way roads**

Starts from the outer right limits of one waiting area and extends to the outer left limits of the other waiting area.

### DYNAMIC LIGHTING

In case interactive systems are installed, the pedestrian crossing and its users may be more visible if the lighting level is increased when they are crossing. At least one (1) lighting class increase from the standby mode is requested. If the standby requirement is already EV1, a minimum increase of 50% is requested.

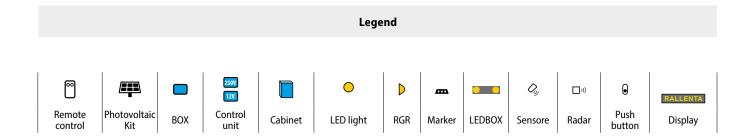


### WARNING AND SAFETY LIGHT DEVICES

Active safety devices are another way to increase the visibility of pedestrian crossings especially during the day:

- Backlit signs minimum class L2 according to EN 12899-1
- Flashing lights minimum class L8M (with 90x90 cm signs) or L2H (with 60x60 cm signs) according to EN 12352.





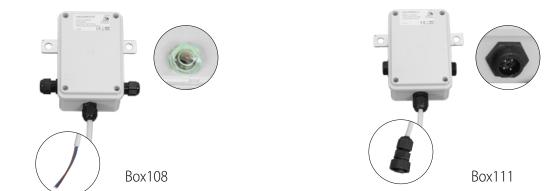
	Juction Boxes / By-pass		Suitable for:
вох <b>100</b>	Junction box 2 out		All BASIC LED lights with external control
<sup>Вох</sup> 102	Splitter box for sensor/push button with connectors for SAFETY CROSS	Safety Cross	SAFETY CROSS
<sup>Вох</sup> 104	Junction box 3-4 out		All BASIC LED lights with external control
<sup>вох</sup> 106	Conversion box from standard power supply kit to by-pass for SAFETY RADAR		RADAR LC INDICATOR FLAT 3/ PLUS/ VARIO TEMPOFLASH DOUBLE SYSTEM
вох 111	Splitter box for LEDBOX with connectors for SAFETY CROSS	Safety Cross	SAFETY CROSS
Box 115	Junction box for sequence central power supply with THB.384 connectors		LED LIGHTS SEQUENCES BASIC 210
<sup>вох</sup> 134	BOX receiver 12/24V, 1-2 OUT		Using the remote control 5000503542, the BOX switches on devices at 40m



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	Box104	H-1	3ox113
Box 137	By-pass box with diode, sequence light application with multiple power supply		SEQUENCE LIGHTS SYSTEM with multiple power supply
Box 144	Switch BOX with LED indication		To be installed between power supply and device to turn on
вох <b>303</b>	Junction box 2/3 out, TH392, IP68, with cap		KRONOS SIDE 25
	Boxes for sequences		Suitable for:
HBox 113	Thermosetting BOX for sequence CE011, 10th, with night dimming 12/24Vdc		All BASIC LED lights with external control and RGR marker
Box 113	Control unit for sequence CE011, 10 <sup>th</sup> , with night dimming 12/24Vdc		All BASIC LED lights with external control and RGR marker
Box 114	Control unit for sequence CE011, 10 <sup>th</sup> , without night dimming 12/24Vdc		KRONOS SIDE 25
Box 118	Control unit for sequence CE011, 10 <sup>th</sup> , with night dimming, 12/24Vdc, guiding light		All BASIC LED lights with external control and single LEDBOX





	Boxes for fixed devices	Suitable for:
Box 108	Control unit for double sync. FlashLED night dimming 12-24Vdc	All BASIC LED lights with external control
Box 109	Control unit for triple/quadruple sync. FlashLED night dimming 12-24Vdc	All BASIC LED lights with external control
Box 116	Control unit for double sync. FlashLED night dimming 12-24Vdc with radar connector	All BASIC LED lights with external control + 4P connector on power supply
Вох 117	Control unit for triple/quadruple sync. FlashLED night dimming 12-24Vdc with radar connector	All BASIC LED lights with external control + 4P connector on power supply
Box 119	Conversion box from standard power supply kit to by-pass for SAFETY RADAR (external control devices)	Tutti i proiettori BASIC a comando esterno LEDBOX a comando esterno con connettore 4 poli
Box 121	BOX impianto triplo FlashLED, sincronizzato, rid. nott., 12-24Vdc, connettore per radar	All BASIC LED lights with external control with 4P connector
<sup>Box</sup> 124	Conversion box from standard power supply kit to by-pass for SAFETY RADAR (external control devices) with M16 cable gland for input LED Lights	All BASIC LED lights with external control



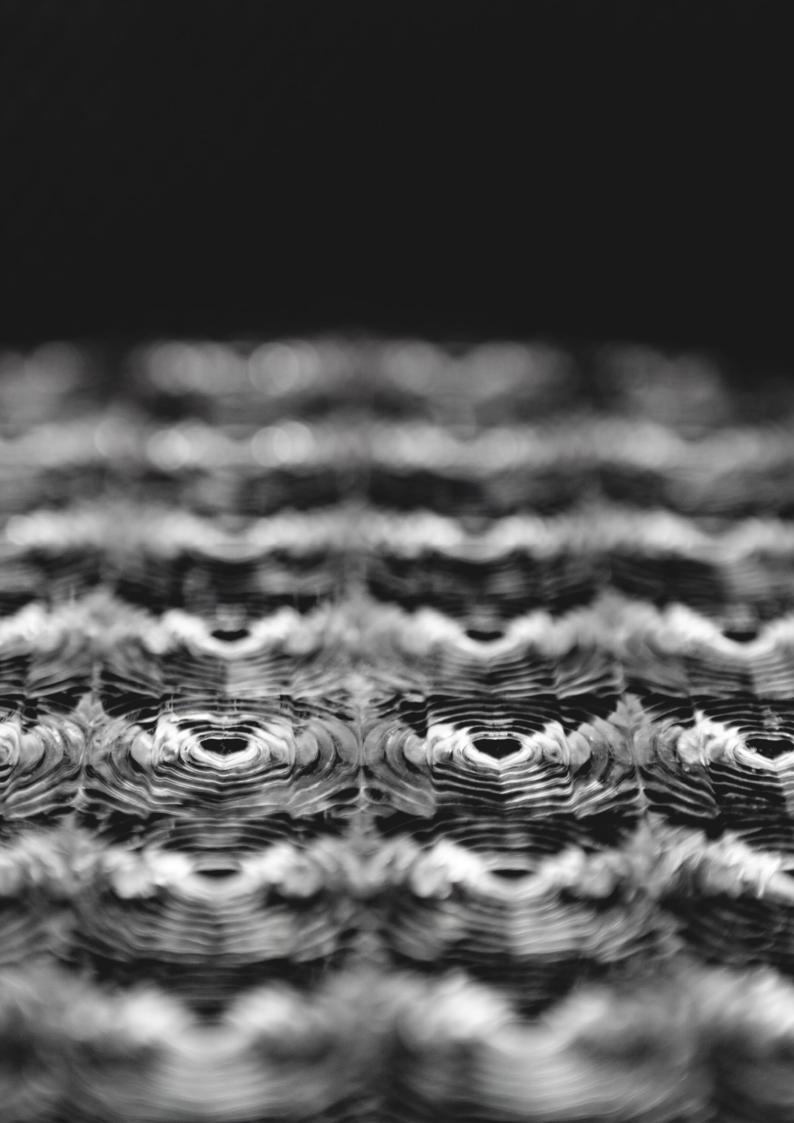
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вох 129	Control unit with L50 flash 20%, Night dimming, 12Vdc conn.F 4P for sensor, 2xF 2P for input LED lights	SAFETY RADAR with display "Slow Down" + BASIC 998342 SAFETY RADAR with display "Slow Down" + cup
<sup>Вох</sup> 136	BOX for double sync. TRIflash night dimming 12-24Vdc	All BASIC LED lights with external control
вох 146	BOX for triple/quadruple sync. TRIflash night dimming 12-24Vdc	All BASIC LED lights with external control
	Control units	Suitable for:
<sup>Вох</sup> 131	Control unit for sequence with night reduction 12/24Vdc LC401 / 5 out 12-24Vdc	To be used up to 5 pieces of Side25, PowerGround 2, PowerGround 3, Kronos or LED lights with external control
вох 132	Control unit for sequence with night reduction 12/24Vdc LC401 / 5 out 230Vac	To be used up to 5 pieces of Side25, PowerGround 2, PowerGround 3, Kronos or LED lights with external control
	reduction	of Side25, PowerGround 2, PowerGround 3, Kronos or LED lights with external



FIXED SAFETY DEVICES



## LED LIGHTS









Certification	UNI EN12352 L2H			
Input voltage	12/24 VDC			
Colour	•••			
Max. power consumption	4.1 W			
Dimensions	Ø 88 x 21.	5 mm		
Flashing	Power co	ons. @12V		
Flash LED (10%)	0.82 Ah	/day		
Tri Flash (5%+5%+5%)	1.23 Ah	/day		
Single (50%)	4.1 Ah	/day		
Steady	8.2 Ah	/day		



Adapter for Basic 80

FL (FlashLed) 10%

Basic 80 and Basic 102 are LED warning lights for fixed or temporary use especially appropriate when reduced dimension is needed.

They are available only with external control and they are suitable for all the application where there is a need to warn, inform or guide road users.

### **BASIC 102**



Certification	UNI EN12352 L2H
Input voltage	12 VDC
Colour	$\bigcirc \bigcirc igodot$ $igodot$
Max. power consumption	3.8 W
Dimensions	Ø 139 x 19 mm

Flashing	Power cons. @12V	
Flash LED (10%)	0.8 Ah	/day
Tri Flash (5%+5%+5%)	1.2 Ah	/day
Single (50%)	4.0 Ah	/day
Steady	8.0 Ah	/day

17



Adattapter for Basic 102



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Basic 200 is a LED warning light for fixed applications. The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.



Certification	UNI EN12352 L8H - L8M
Input voltage	12 VDC - 12/24 VDC
Colour	
Max. power consumption	7.8 W
Dimensions	Ø 198 x 65 mm

Flashing	Power cons. @12V		
Flash LED (10%)	1.6 Ah	/day	
Tri Flash (5%+5%+5%)	2.3 Ah	/day	
Single (50%)	7.8 Ah	/day	
Steady	15.6 Ah	/day	

FL (FlashLed) 10% \* on time 50%



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Some examples of applications:

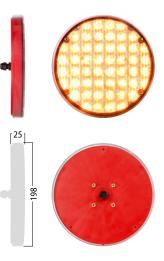
Basic 201 is the flat version of the Basic 200. The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.



Certification	UNI EN12352 L8H - L8M
Input voltage	12 VDC - 12/24 VDC
Colour	
Max. power consumption	7.8 W
Dimensions	Ø 198 x 65 mm

Flashing	Power cons. @12V		
Flash LED (10%)	1.6 Ah	/day	
Tri Flash (5%+5%+5%)	2.3 Ah	/day	
Single (50%)	7.8 Ah	/day	
Steady	15.6 Ah	/day	

FL (FlashLed) 10% \* on time 50%



Some examples of applications:









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Basic 302 is a LED warning light for fixed applications. The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.

Certification	UNI EN12352 L9H - L9M	
Input voltage	12 VDC - 12/24 VDC	
Colour	•	
Max. power consumption	17.5 W	
Dimensions	Ø 333 x 110 mm	
Flashing	Power cons. @12V	
Flash LED (10%)	<b>3.0 Ah</b> /day	
Tri Flash (5%+5%+5%)	<b>4.5 Ah</b> /day	

15 Ah

30 Ah

/day

/day



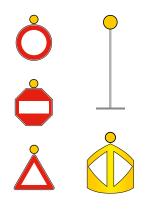




Some examples of applications:

Single (50%)

Steady







Basic 304 is the flat version of the Basic 302. The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.

Certification	UNI EN12352 L9H - L9M	
Input voltage	12 VDC - 12/24 VDC	
Colour	•	
Max. power consumption	17.5 W	
Dimensions	Ø 333 x 64 mm	
Flashing	Power cons. @12V	
Flash LED (10%)	<b>3.0 Ah</b> /day	
Tri Flash (5%+5%+5%)	<b>4.5 Ah</b> /day	

15 Ah

30 Ah

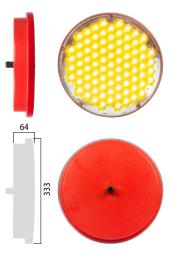
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Some examples of applications:



Single (50%)

Steady







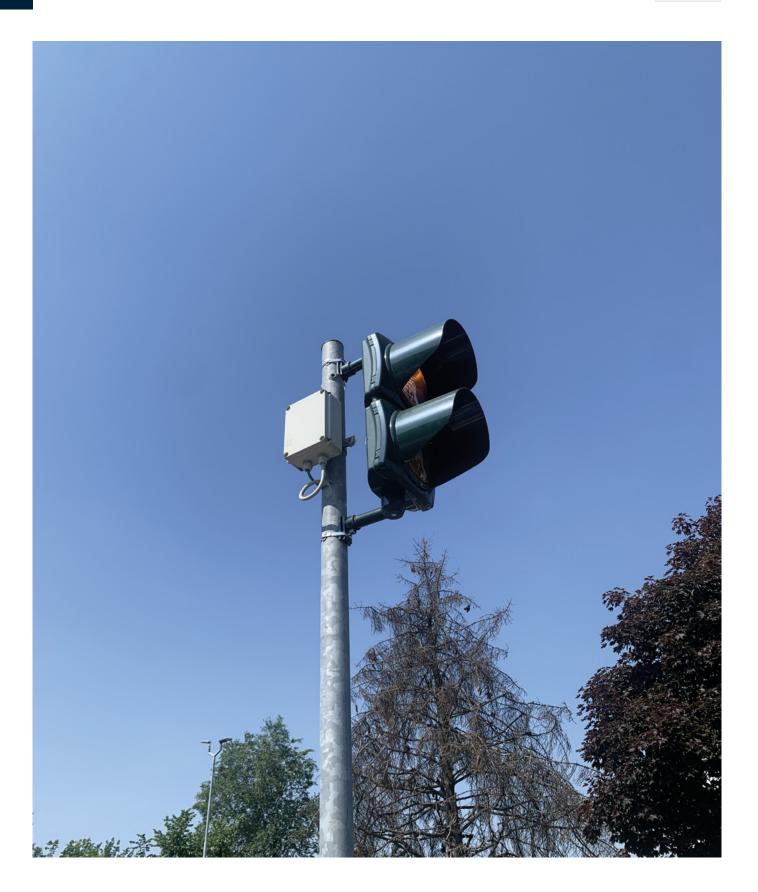


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## LED TRAFFIC LIGHTS



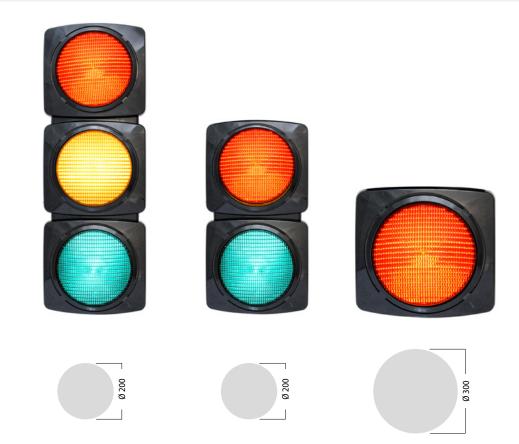


### FIXED SAFETY DEVICES LED TRAFFIC LIGHTS

The recent technology improvement has been adopted by the latest LED traffic lights. In compliance with European standard **EN12368** and with very low power consumption, the customer can obtain can better visual safety, a higher energy saving and a long life with no maintenance.

Certification CE	UNI EN12368	
Input voltage	12 VDC 230 VAC	
Colour	•••	
Power cons.	3 W 7 W	
Dimensions	Ø 200 / 300 mm	







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## POWER SUPPLY KITS



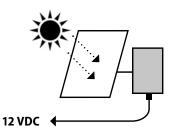




## **PHOTOVOLTAIC KIT**

Stand-alone photovoltaic kits to provide power to the devices throughout the year.

Our technical department will choose the best solution for each installation.



Module	Battery	Mounting plate
50 W	45 Ah	Ø 60 - Ø 90
100 W	90 Ah	Ø 60 - Ø 90
190 W	90 Ah	Ø 90

- Photovoltaic module
- **2** Mounting plate
- € Cabinet
- **O** Charging regulator

ิก

- AGM battery specifically
  - designed for photovoltaic system









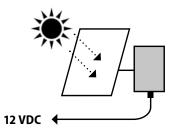
## COMPACT PHOTOVOLTAIC KITS

Stand-alone compact photovoltaic kits ideal for applications where is not possible to use an external box.

Our technical department will choose the best solution for each installation.

Module	Battery	Mounting plate
10 W	12 Ah	Ø 60 - Ø 90
20 W	18 Ah	Ø 60 - Ø 90
50 W	45 Ah	Ø 90







20 W





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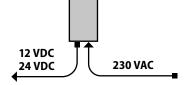
## **POWER SUPPLY/BATTERY KITS**





## POWER SUPPLY KITS

Power supply kit **230 V**, in box IP56, for all devices, Class II, suitable to provide energy for fixed devices.



### **2** Power supply switch mode

### 🕑 Box





## POWERSTATION

The PowerStations are Class I supply cabinet ideal for powering high load fixed devices.

Three models are available, all equipped with SPD and automatic circuit breaker:

PowerStation 12 (12VDC)

PowerStation 24 (24VDC)

PowerStation 48 (48VDC).

Each PowerStation can be equipped with a flashing control unit 12/48V (see pg. 42).



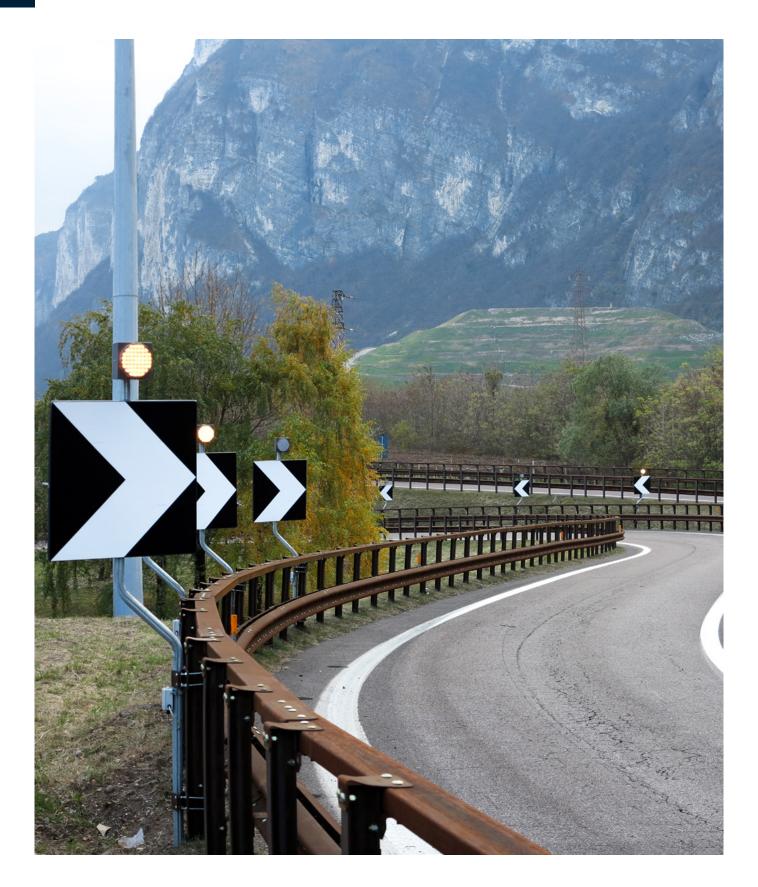
Input voltage	230 Vac		
Output voltage	12 Vdc	24 Vdc	48 Vdc
Max. power	240 W	480 W	480 W
Max. output current	20 A	20 A	10 A
Protections	Overvoltages - Overcurrents		
Insulation class	Class I		
IP protection class	IP56		
Operating temperature	-10°C ÷ +55°C		
Dimensions	260 x 850 x 260 mm		



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## FIXED SEQUENTIAL LIGHT SYSTEMS







## BASIC SEQUENCES

Sequence lights systems with cable. **EN12352 certified LED lights.** 

Supplied with M16 - M20 cable glands.

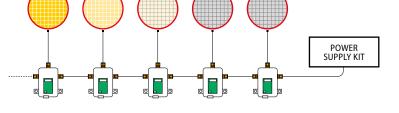




LEDBOX BASIC 201

BASIC 304

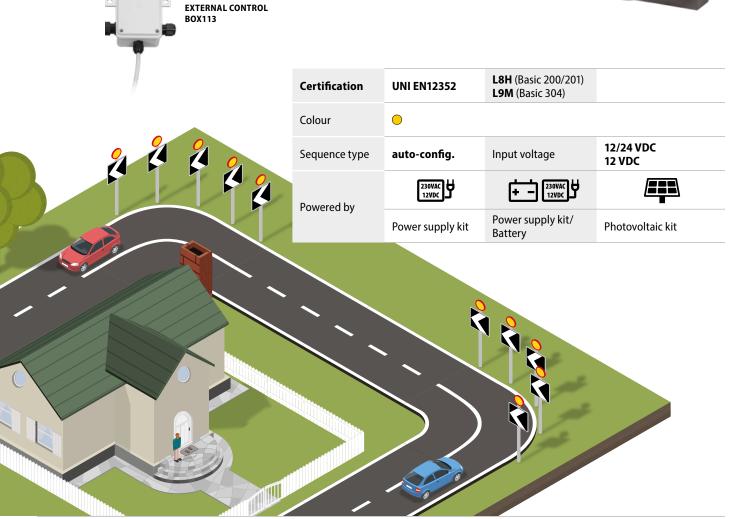
LEDBOX BASIC 304



LED lights for sequential systems with external control.









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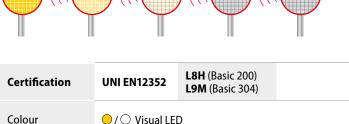


## D-SOLAR RADIO

Sequence lights system with wireless radio technology. Ready to mount.

### EN12352 certified LED lights.

Min. distance between lights 1 m, max. 80 m. No lights limit. Synchronous flashing also available.



Input voltage

Photovoltaic kit

12 VDC

10 W (Basic200)

20 W (Basic304)

auto-config.

/222





LEDBOX BASIC 201

VISUAL LED



BASIC 200



LEDBOX BASIC 304



BASIC 304

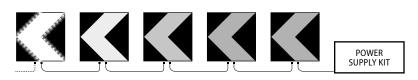
## VISUAL LED

LED sequential chevron.

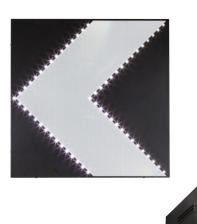
Sequence type

Powered by

Aluminium enclosure painted with epoxy. Also available with backlit sign.



Dimensions	60 x 60 cm		
Colour	$\bigcirc$ + diamond grade film		
Sequence type	auto-config.	Input voltage	12 VDC
Powered by	230VAC 12VDC	+ - 230VAC 12VDC	
	Power supply kit	Power supply kit/ Battery	Photovoltaic kit



Dower

## ROAD MARKERS







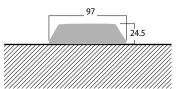
### LED PHOTOVOLTAIC ROAD MARKER.

Not carriageable.

The product must be installed outside of the roadway.

Compliance	EN1463-3
Colour	● ● ○ ○ Double side
Light	Steady / Flashing
Working	🕓 Only night
Storage	Ni-Mh battery
Material	Die-cast aluminum
Dimensions	97 x 110 x 24.5 mm





## **(** SOLARGROUND 2

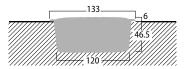
### FLUSH MOUNT PHOTOVOLTAIC LED MARKER.

Carriageable.

Even if carriageable the product must be installed outside of the roadway.

Compliance	EN1463-3
Colour	$\bigcirc$ Single side $\bigcirc$ Double side
Light	Steady / Flashing
Working	🕓 Only night
Storage	Ni-Mh battery
Material	Die-cast aluminum
Dimensions	Ø133 x 52.5 mm







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Syn<sub>5</sub>

Syn<sub>5</sub>



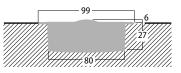
### LED PHOTOVOLTAIC ROAD MARKER.

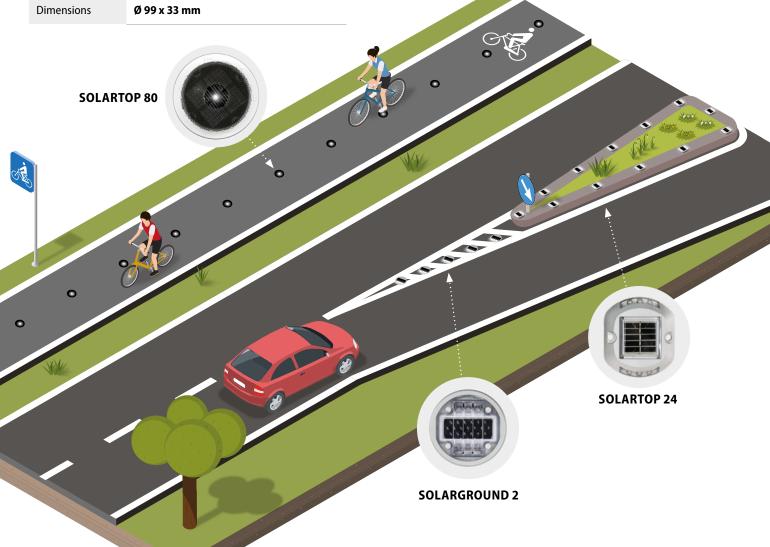
Not carriageable.

The product must be installed outside of the roadway.

Compliance	EN1463-3
Colour	○ 360°
Light	Steady
Working	🕑 Only night
Storage	Ni-Mh battery
Material	High-strength polymer
Dimensions	Ø 99 x 33 mm









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## **(** MINI **GLASSTOP**

### RETROREFLECTIVE MARKER.

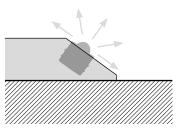
Carriageable.

Even if carriageable the product should be installed outside of the roadway.

Self cleaning.

Certification	EN1463-2
Reflection	360° horizontally 180° vertically
Material	Tempered glass with rubber cover
Dimensions	Ø 50 x 55 mm
Dome height	12 mm





## X MICRO GLASSTOP

### RETROREFLECTIVE MARKER.

Not carriageable.

Small size.

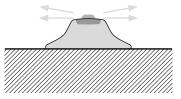
The product should be installed outside of the roadway.

Self cleaning.

Compliance	<b>UNI EN1463-2</b> Art.153 (Art.40 C.d.S.)
Reflection	360° horizontally
Material	Tempered glass
Dimensions	Ø 50 x 20 mm
Dome height	10 mm











# () Glasstop

### RETROREFLECTIVE MARKER.

Carriageable.

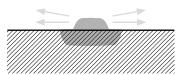
Even if carriageable the product should be installed outside of the roadway.

Self cleaning.

	-26 -
100	



Approved	EN1463-2
Reflection	360° horizontally
Material	Tempered glass
Dimensions	Ø 100 x 44 mm
Dome height	18 mm



#### CLASSTOP CLA



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### DOS

#### LED LIGHTING DEVICE FOR THE ILLUMINATIONS OF ESCAPE ROUTES IN TUNNELS,

with polycarbonate body and stainless steel base.

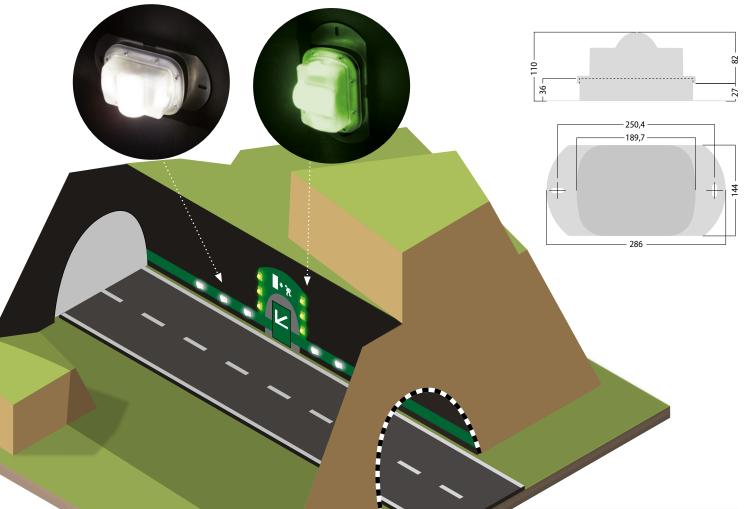
- Available in different operating modes:
- IReverse polarity
- Voltage switch (24V-48V)
- Third wire with PWM.

External or internal connection on ceramic terminal block to ensure the continuity of power in case of fire.

#### In compliance with EN16276 In compliance with EN 1838 (ANAS Guidelines)



Colour	0	٠
Light	> <b>15 cd</b> (steady)	> <b>100 cd</b> (flashing)
Absorbed power	5 W	6 W
Power supply	12÷48 VDC	
Material	Polycarbonate UL94-V0 Inox AISI 304	
Dimensions	286 x 144 x 110 mm	







### LED MARKER.

Not carriageable. For tunnels, roundabout, dangerous point, edges, etc. **6 high-brightness** LEDs each side. The product must be installed outside of the roadway.

Compliance	EN1463-3	
Colour	<ul> <li>Single side</li> <li>Other colours on request</li> </ul>	
Light	Steady Sync. flashing with external flashing control unit Sequence with external control unit	
Power supply	1148 VDC	
Max. power consumption	ingle side: <b>0.44 W@48 V</b> Double side: <b>0.85 W@48 V</b>	
Material	Polycarbonate ULV0	
Dimensions	90 x 128 x 25 mm	

DOUBLE SIDE





128

25

ONE SIDE

NY/



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# **(**) POWERGROUND 3

#### IN-PAVEMENT HIGH POWER LED. (>200cd)

Carriageable.

Available in single side or double side version.



**····** 

Compliance	EN1463-3		
Colour	O O Patented LED optics		Template supplied
	Steady		1
Light	Sync. flashing with external flashing control unit	155	
Power supply	1048 VDC	- 83	
Max. power	○ Single side: <b>3.6 W</b>		
consumption	OO Double side: <b>7.2 W</b>		
Material	AISI 304 stainless steel	_	
Dimensions	Ø 155 x 87 mm		

6

6



11

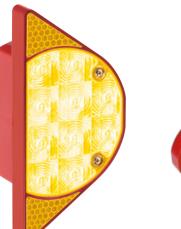
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### RGR

### LED MARKER FOR GUARDRAIL.

RGR, thanks to its high visibility and low power consumption, is an excellent solution for dangerous curves, motorway exits, tunnels and all the other dangerous situations on the road. Ideal for zones with high presence of fog.

Approved	EN12352 L2H		
Colour	•		
Light	Fissa	<b>Sync. flashing</b> with external flashing control unit	Sequence with external control unit
Power supply	1848 VDC	Power consumption (steady light)	3.9 W @48 V
Material	ABS		
Dimensions	70 x 140 x 45 mm		





••••



#### Examples of applications:

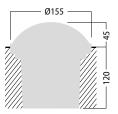




#### LUMINOUS LED INSERT WITH VERY LOW POWER CONSUMPTION.

Not carriageable.

Ideal for cuspidal points, roundabouts and fatal edges. Usable with photovoltaic power supply.



Colour	• •	Other colours on request	
Light	Steady	<b>Sync. flashing</b> with external flashing control unit	Sequence with external control unit
Power supply	11 Vdc ÷ 24 Vdc class III 230 VAC class II	Max. power consumption	6 W
Material	Die cast aluminum body PP formwork		
Dimensions	Ø 155 x 165 mm	Dome height	45 mm



••••











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### FLASHING CONTROL UNIT

Flashing control unit for road marker series.

Connectable markers	Nr. max.
Side 25	160
Kronos	40
RGR	60
PowerGround 3 HP	65
Input voltage	12/48 VDC
Functions	night dimming remote control
Duty cicle	50% 20% <10%
Dimensions	125 x 80 x 50 mm



### **POWER SUPPLIES**

AC-DC DIN rail mountable power supply.

Model	GSA SWP10	GSA SWP20
Certifications	UL, cUL, CE	UL, cUL, CE
Input voltage	85264 VAC	85264 VAC
Output wattage	240 W	480 W
Output voltage	48 VDC	48 VDC
Output current	5 A	10 A
Efficiency	>94%	>94%



GSA SWP10



GSA SWP20



# SAFETY DEVICES





### DIVIDING MARKER IDEAL FOR JUNCTIONS, **CUSPS AND OTHER** DANGEROUS SPOTS. Operating with photovoltaic panel or 230 VAC. LED Basic 102 sequential. Arrows in Class 2 film. SEQUENCE Shock resistant. 000 Various sizes available. Ý Ø D 3 LED lights Model 5 LED lights Basic 102 Basic 102 EN 12352 Certification EN 12352 - L2H L2H 0 0 Colour Flashing Sequence Sync. 230VAC 12VDC + - 230VAC 12VDC Powered by Photov. kit Power supply/ Power Photovoltaic kit 20W Battery kit supply kit 10W Ø 100 - Ø 150 - Ø 200 cm Ø 60 cm Dimensions





(†

### D-SOLAR

**D-solar** are LED lights with photovoltaic suitable for highways and heavy traffic areas. They are ideal for cuspidal points, crossroads and fatal edges. The photovoltaic kit is bigger than the one used for the Ecosolar and that makes them a perfect choice for application with critical weather conditions. Easy to install and to maintain.



Approved	Basic 200 Basic 302	EN12352 - L8M EN12352 - L9M	-			
Colour	•				- T	- 1
Powered by		Photovoltaic kit		10 W Basic 200 20 W Basic 302		
Working	<del>\</del> ¢	24 ore	G	Optional only night		
Fixing	Ø60					
Dimensions	Basic 200 Basic 302	Ø 200 x 65 mn Ø 333 x 110 mr				



# ECOSOLAR

**Ecosolar** is a line of products with a wide range of **solar powered devices** designed to signalize dangerous situation and integrate the traffic signs.

The Ecosolar line uses **LED lights certified to EN 12352**. The compact design and the **extremely easy installation** make the Ecosolar the perfect choice for any type of pole and traffic signs.

The Ecosolar line is designed to be installed also on existing traffic signals. Power saving options ensures high autonomy even in critical weather conditions. To ensure the correct operation of the devices it is however necessary that the photovoltaic panel receives direct sunlight at least during the central part of the day.

Ecosolar single Basic 201	Ecosolar double Basic 201	Ecosolar double Basic 201 single sided	Ecosolar double Basic 102	Ecosolar double Basic 102 double sided
Central mount	Central mount	Flag mount	Central mount	Flag mount
photovoltaic panel <b>5 W</b>	photovoltaic panel <b>10 W</b>	photovoltaic kit <b>10 W</b>	photovoltaic kit <b>10 W</b>	photovoltaic kit <b>10 W</b>
	some	example of applic	ations:	
0				



**ECOSOLAR SINGLE BASIC 201** 



**ECOSOLAR DOUBLE BASIC 201** 



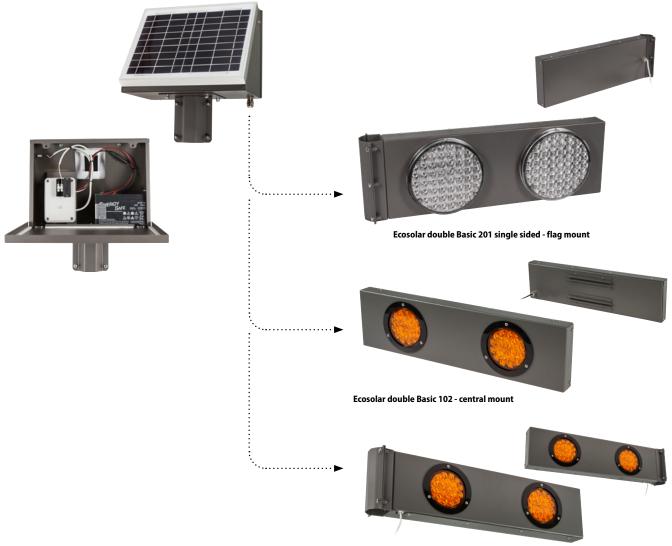


Syn<sub>5</sub>

Certification	Basic 201 Basic 102	EN12352 - L8H EN12352 - L2H
Colour	•	
Powered by		Photovoltaic
Working	- 0 - 24 ore	<b>Optional only night</b>
Fixing	Ø 60 Ø 90	
Box dimensions	1 Basic 201 2 Basic 201 2/4 Basic 102	210 x 210 x 120 mm 600 x 210 x 120 mm 600 x 160 x 60 mm

Ecosolar are powered of	only
by photovoltaic ene	ergy.

### For solutions powered by the electrical network, see LEDBox on the next page →



Ecosolar double Basic 102 double sided - flag mount



# LEDBOX

**LEDBox** is a family of products designed to keep a low impact in aesthetics while delivering a great active safety signal.

They are provided as standard with external control, but there are some models with integrated control unit or with 230 VAC power supply.

# The LEDBox external control can be used with:

Our Compact Photovoltaic Kit with S600 controller.

Our Box and control units (see pages 10-11).

Our DIN rail mountable flashing control unit (see page 32).



Some examples of applications:

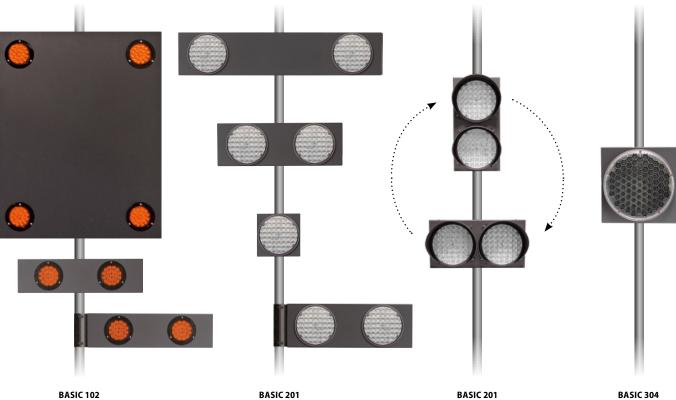


Certification	Model	
		LEDBox 2 x Basic 102 - central mount
UNI EN 12352 - L2H	LEDBox Basic 102	LEDBox 4 x Basic 102 - central mount
UNI EN 12332 - L2FI	LEDDOX Dasic 102	LEDBox 4 x Basic 102 - flag mount for APL
		LEDBox 4 x Basic 102 - flag mount
		LEDBox 1 x Basic 201 - central mount
	LEDBox Basic 201	LEDBox 2 x Basic 201 - central mount
UNI EN 12352 - L8H L8M		LEDBox 2 x Basic 201 - central mount
UNIEN 12552 - LOFILOM		LEDBox 2 x Basic 201 - flag mount
		LEDBox 2 x Basic 201 horizontal with visor - orientable mount
		LEDBox 2 x Basic 201 vertical with visor - orientable mount
UNI EN 12352 - L9H L9M	LEDBox Basic 304	LEDBox 1 x Basic 304 - central mount





### FIXED SAFETY DEVICES SAFETY DEVICES



BASIC 201 ORIENTABLE

BASIC 304

LED colour	Powered by	Input voltage	Fixing	Box dimensions
				600 x 160 x 60 mm
				800 x 1000 x 45 mm
				650 x 160 x 60 mm
	230VAC 12VDC			600 x 160 x 60 mm
	Power supply kit 230 VAC 12 VDC More voltages on request Power supply/ Battery kit		210 x 210 x 120 mm	
•		•• • •	600 x 210 x 120 mm	
			900 x 210 x 120 mm	
			600 x 210 x 120 mm	
			220 x 440 x 161 mm	
				220 x 440 x 161 mm
				360 x 360 x 115 mm





# ANIMAL GUARDIAN 4

## Animal Guardian is an innovative device to prevent the fatal street crossing by the wild animals.

It's powered from a high efficiency solar module and it is working during the night emitting both a luminous signal and a constant sound. The activation is given by the vehicle head lights.

Colour	🔵 🔴 🌒 + beep		
Powered by	Photovoltaic panel with auxiliary Li-Pol Battery		
Working	C Only night		
Fixing	Screw		
Dimensions	36 x 160 x 70 mm		





# ANIMAL UNI-REFLECTOR Animal Guardian can be integrated with Animal Uni Reflector. On the side an example of minimum recommended installation: alternate each Animal Guardian with three Animal Uni-Reflectors. **Reflective colour** Ο optional Fixing Screw Dimensions 45 x 197 x 64 mm Animal Uni-Reflector Animal Guardian 4



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# SAFETY SYSTEMS





# SAFETY CROSS

# Safety system for crosswalks with pedestrian radar and flashing lights.

- 1. The system starts to work when a pedestrian approaches the crosswalks zone within the sensor area.
- 2. The LED lights flash on both sides of the road through a wireless communication.

No wiring inside the road.

Easy installation on existing signs.

Energy saving function.

Increased noise immunity.

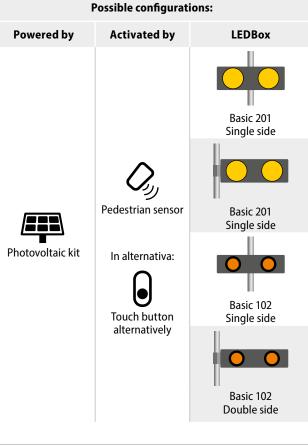
New flash functions available.



Certification	Basic 201 Basic 102	EN12352 - L8H EN12352 - L2H	
Colour	•		-
Powered by	Photovoltaic kit	20 W - 18 Ah	
Activated by	Pedestrian sense Touch button	or	
Fixing	Ø60 Ø90		
Box dimensions	Basic 201 Basic 102	600 x 210 x 120 mm 600 x 160 x 60 mm	







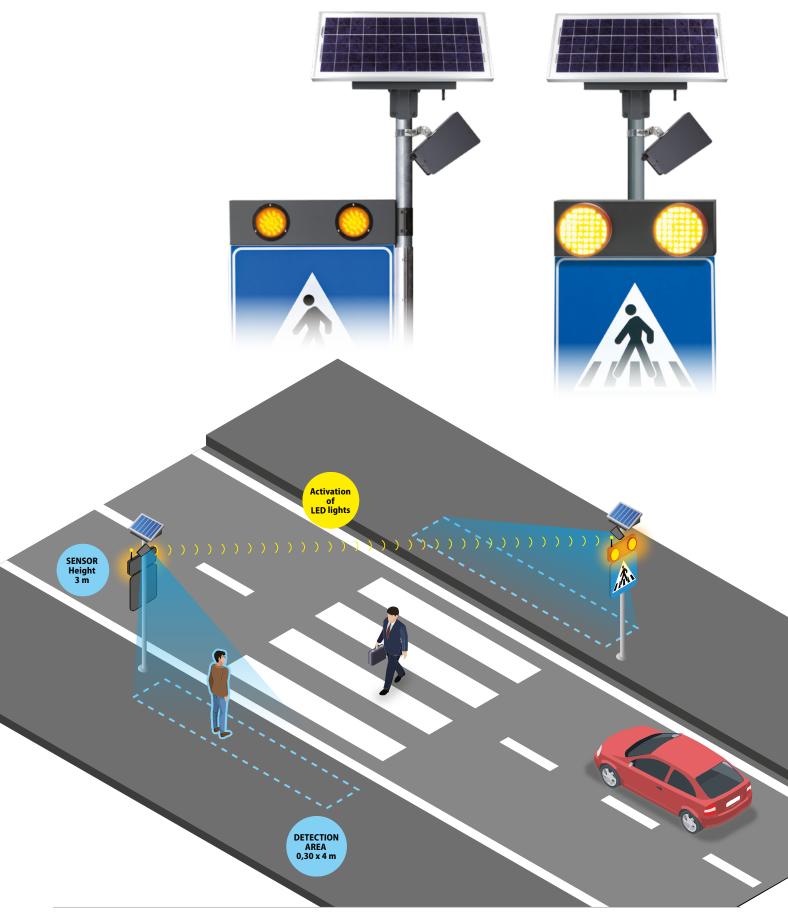


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Single sided

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# SAFETY RADAR

Safety Radar is very effective device for speed reduction nearby cities, dangerous points, motorway ramps, one-way street etc.

Flashing lights system with doppler radar which detects the car and the speed and sends a signal to the lights if the limit has been exceeded. Available with LED message panel.. Signage panel not provided.





Radar LC/LCL

Radar FALCON BASIC

BASIC 201







# SAFETY RADAR SOLAR BOX

#### Safety Radar Solar Box is very effective device for speed reduction nearby cities, dangerous points, motorway ramps, one-way street etc.

Flashing lights system with doppler radar which detects the car and the speed and sends a signal to the lights if the limit has been exceeded. Easy retrofit of existing signs.

Radar LC/LCL Radar FALCON BASIC



LEDBOX BASIC 102

LEDBOX BASIC 201

Certification	Basic 201 Basic 102	EN12352 L8H EN12352 L2H			
Colour	•		-		
Powered by		Photovoltaic kit <b>20 W</b>			
Radar range	Radar LC: <b>100 m</b>	Radar LCL: <b>200 m</b>			
LEDBox dimensions	1 Basic 201 2 Basic 102	210 x 210 x 120 mm 600 x 160 x 60 mm			
				Exemples of application: Safety Radar Solar box	



# TEMPO FLASH

TempoFlash is a safety device that advises the road users about the ice condition of the road surface.

When the outside temperature goes below 3°C the LED flashing double system activates. **The temperature can also be displayed.** 

Available version with a high precision temperature probe to insert directly into the ground.

The system sends an SMS at a set temperature and can be used in "remote control mode" at any time to obtain information (temperature, system status etc.).



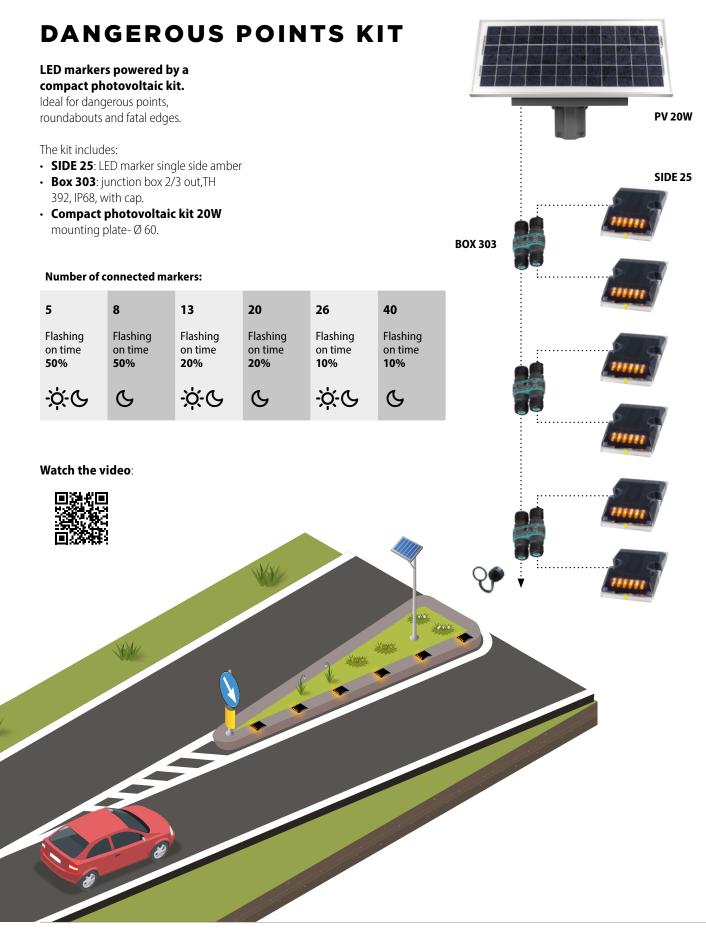




Certification	Basic 201	EN12352 L8H	
Colour	LED lights	display	
Doworod by	230VAC 12VDC	+ - 230VAC	
Powered by	Power supply kit	Power supply/ Battery kit	Photovoltaic kit
Power consumption	<b>13 W</b> max.	+ <b>6 W</b> display	
Display	740 x 310 x 70 m	ım	
Digit height	20 cm	Reading distance	100 m

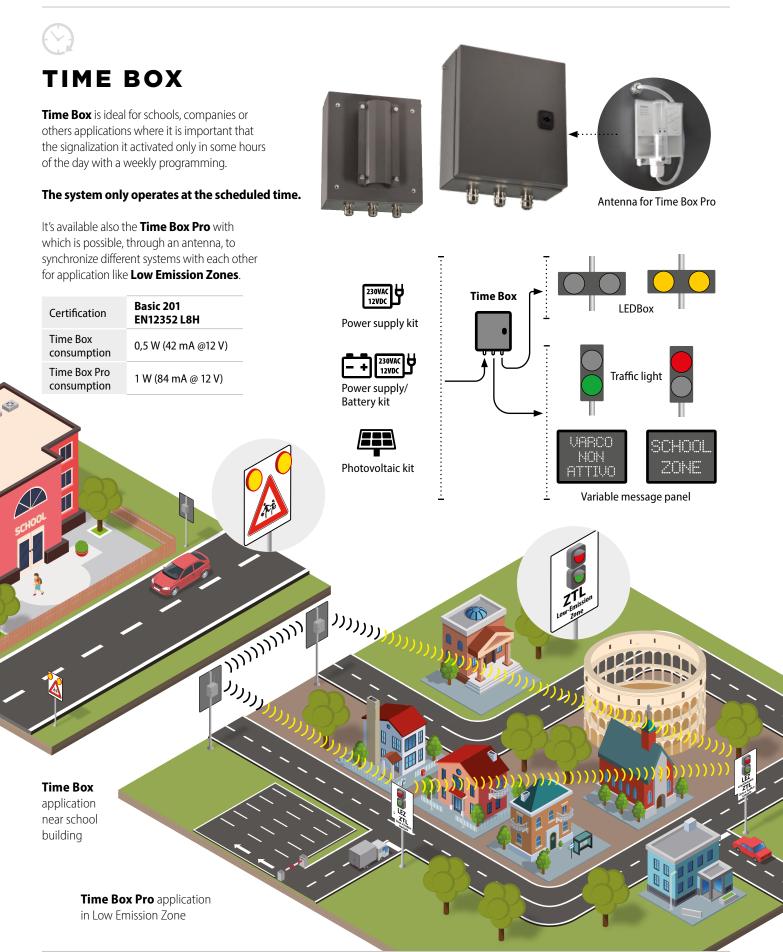














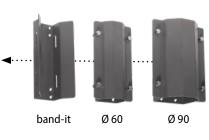


# BLACK OUT

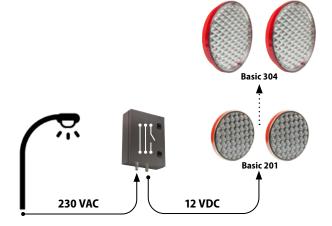
The Blackout system provides an auxiliary power supply integrable in all systems in which is essential to report a power failure.

The power supply is activated directly from the lack of voltage on the line and provides power to the system with the included battery. The battery is automatically recharged from the line as soon as it is restored.





Powered by	Power supply/ Battery kit	230 VAC/12 VDC Battery 18 Ah			
Activated by	lack of voltage on the line				
Fixing	Band-it - Ø60 - Ø90				
Dimensions	280 x 360 x 100 mm				









# NRS + VARIO NIS DISPLAY

### NOISE REDUCTION SYSTEM.

The mobile NRS (Noise Reduction System) combines the VARIO NIS Display with a new noise meter. It is used to reduce harmful noise emissions especially in residential areas. The NRS records the volume of the passing vehicles and transmits a radio signal to the distant LED display (max. 100 m) when an adjustable threshold value (dBA) is exceeded. The display gives direct feedback to the driver that can be individually designed such as "Too loud!". Emoticons and other customized symbols can be shown on the display.

Model	NRS
Powered by	+ - 12V 18Ah AGM battery included
Measuring range	40 dBA ÷ 120 dBA
Data storage	Micro SD memory card or Bluetooth
NRS e Vario NIS connection	Wireless
Dimensions	372 x 260 x 100 mm
Model	VARIO NIS DISPLAY
Powered by	+ - 12V 18Ah AGM battery included
Resolution	32 x 28 px
Connection	USB, Bluetooth
Software	App Android included
Dimensions	685 x 720 x 60 mm



### **Control panel** in battery housing.

Thanks to a 12 volt battery supply the NRS is mobile applicable and oers a particularly long operating time, which can still be expanded by the optional solar power supply. The control panel allows the user to adjust the measurement parameters on site.



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NOISE







**VARIO NIS** panels can be

customized with a price variation.

Volume measurement

Radio signal Data transmission storage

Light housing and easily transportable

#### Some possible configurations





# LED BACKLIT SIGNALS





### FIXED SAFETY DEVICES LED BACKLIT SIGNALS







\* This model can only be equipped with a silk-screened glass and not with the translucent film.



DOUBLE SIDE

DOUBLE SIDE

D-Power presents a wider range to satisfy the growing needs in road signalling.

The ultrathin LED signals guarantee an high uniformity of backlighting and low maintenance. Designed and built according EN12899. The technology we use allows reaching the highest classes of the norm while keeping low the power consumption and overall sizes.

The backlit signals can be supplied with various traffic sign films according to the applicable road code, made using Class 2 Superior translucent films\*.

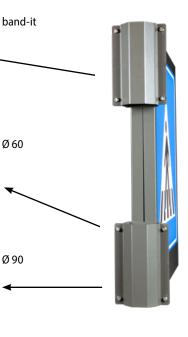
Available with several mounting options.

The new finishing color and design make them suitable for use in town centers, where the aesthetical impact is an important issue. The LED backlit dividing marker includes the Class 2 Superior translucent film.





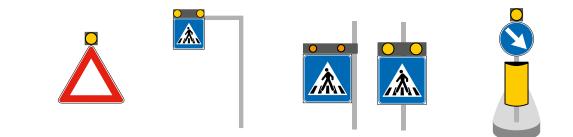








### Some examples of applications:



	Certificat	ion: <b>EN12899</b>		C	olour: 🔘				
LED backlit signs		$\bigtriangledown$			0		$\diamond$		
	single side	single side	double side	double side	single side	single side	single side	double side	single side
Light emiss. area [cm]	90 x 90	82 x 75	90 x 90	90 x 90	Ø 60	60 x 60	60 x 60	60 x 60	40 x 50
Power cons. 230V	54 w	40 w	50 w	42 w	-	40 w	40 w	40 w	-
Power cons. @12V	48 w	32 w	48 w	-	17 w	25 w	25 w	25 w	13 w
Dimensions [mm]	1000 x 1000 x 45	940 x 830 x 58	1005 x 1285 x 62	1065 x 1103 x 200	Ø 650 x 40	640 x 640 x 43	640 x 640 x 43	645 x 735 x 68	280 x 544 x 164



Δ

### SPEED DISPLAYS







### INDICATOR CAM

INDICATOR CAM is a mobile tool for speed enforcement on factory premises, supplied with 12V battery.

#### Exceeding the speed limit will trigger the recording of an image sequence.

The storage images contain time and speed information. These records can be retrieved over the factory network or directly by e-mail.



Video surveillance USB flash drive USB

compatible



Data

Storage

Indicator CAM offers several interfaces (USB, Bluetooth, Wi-Fi, LAN, HSDPA) to download or transfer the collected data. The control panel allows the user to change parameter settings on site.



Control panel



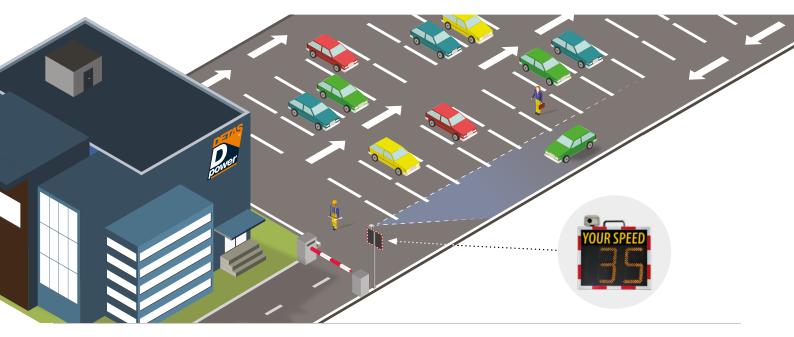
02.03.2016 - 11:03:29 / +1000ms - image-sequence 1/3 detected speed = 32km/h Location: Parcheggio 1 - I-25086 Rezzato - ID = 5678



02.03.2016 - 11:03:29 / +1000ms - image-sequence 2/3 detected speed = 33km/h Location: Parcheggio 1 - I-25086 Rezzato - ID = 5678



02.03.2016 - 11:03:29 / +1000ms - image-sequence 3/3 detected speed = 35km/h Location: Parcheggio 1 - I-25086 Rezzato - ID = 5678







### **INDICATOR** VARIO

### VARIABLE MESSAGE SIGN

 $\bigcirc$ 

available with or without radar detector.

Colour

Ideal to warn, inform or guide road users. Time scheduled programming. Up to 8 images can be displayed at different setting speeds. Speed values displayable from 5 to 255 km/h.









# INDICATOR FLAT 3

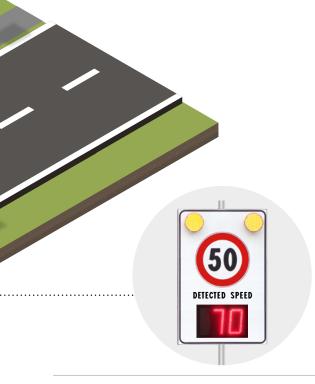
**RADAR BASED,** it is the ideal active signal to encourage safe driving in schools areas, road working zones, motorway intersections, etc.

All the options can be deactivated allowing to use the device in standard mode (only amber).



Some examples of views:

Double colour display	
Speed limit function	$ \begin{array}{c}                                     $
Smile function	



Colour	$\bullet \bullet \bullet \circ$					
Digit height max.	30 cm					
Functions	Smile + speed limit					
	Photovoltaic kit	50 W - 45 Ah				
Powered by	Power supply kit	230 VAC/12 VDC				
	Power supply/Battery kit	230 VAC/12 VDC 18 Ah Battery				
Software	Included / App Android					
Connection	Bluetooth (100m outdooor) RS232	Optional: e-mail-GSM-GPRS-GPS				
Vehicle detection	Bidirectional (only statistic)					
Dimensions	640 x 410 x 75 mm					



# TRAFFIC COUNTER







# TRAFFIC 3000

Radar based **traffic counter** powerful compact and easy to handle. Easily installed on the side of the road from 1 to 3 m high.

### Available e-mail version with GSM/GPRS/GPS.

The device automatically sends all stored traffic data, together with GPS position details (Google Maps compatible), by e-mail every 1 to 7 days (adjustable). An e-mail or SMS will be sent if the battery voltage is low or the data storage is 95% full.

						.·			
Power supply	÷-	<b>18Ah</b> Battery 2 weeks operating t	ime				1.	a	(3)
Software	Include	d							
Connection	<b>RS232</b> Bluetoo GSM-GF	th or e-mail versions, PRS-GPS optional							
Vehicle detection	<b>1-255 k</b> Arriving	<b>m/h</b> , leaving and bidirecti	onal					HALIN SALE	
Data	10 spee 360.000	d classes - 5 vehicle cla vehicles	asses				1		
Dimensions	372 x 2	60 x 234 mm							
0			Evaluation time	listribution	12512 17%	4309 4415 6% 6%	1642 2% 50005 69%		Due ruote Auto Furgoni/SUV Autocar/BUS Autocar/BUS
			Speed limit	70 km/h		Count	Vd[km/h]	Vmax[km/h]	V85 [km/h]
			Speed violations Average gap time	10,93 % 7,85 s	Due ruote Auto	1642 50005	49 58	93 120	63 69
			Queue traffic	32,00 %	Furgoni/SUV	12512	58	109	69
			ADT	10412	Autocar/BUS Autoarticol	4309 4415	55 55	101 94	65 63
			LGV traffic share Evaluation direction	11,97 % Arriving	Total	72883	58	120	
				Annung		12005			68

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**DETAS SpA** - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company Viale Italia

Brescia

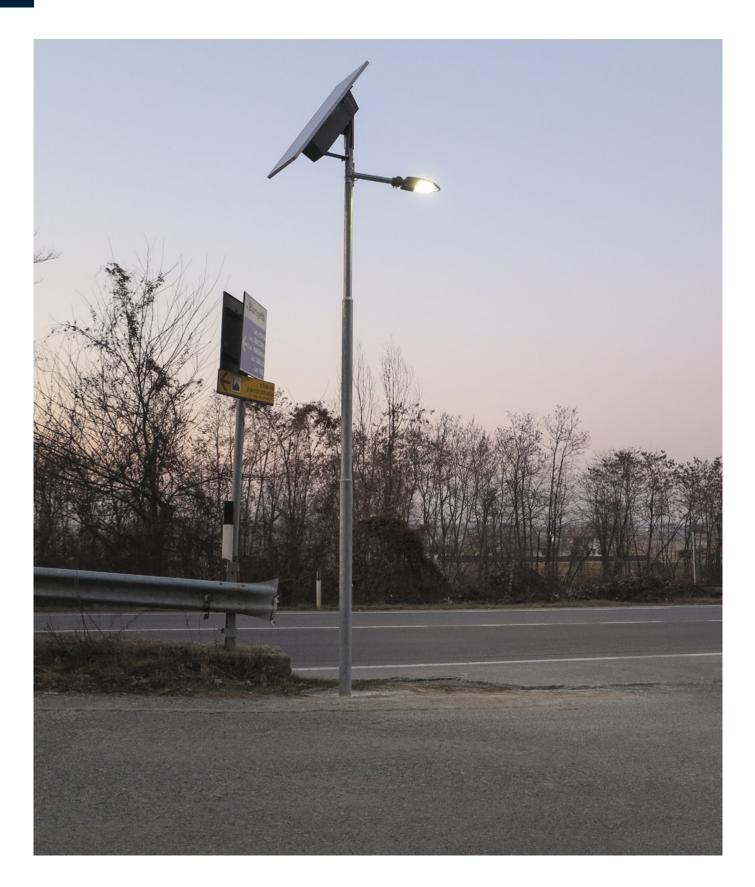
Comment: Location:

Arriving vehicles from: Departing vehicles to:

> +39 030 2594120 info@d-power.com **D-POWER.COM**

# LED PHOTOVOLTAIC STREET LIGHTING







# TRILOGY BUST

The easiest and less expensive way to properly **light places not reachable by the power grid.** 

Ideal for:

- bus shelters
- canopies
- gates
- gardens
- patio
- kiosks
- advertising signs



TRILOGY

Colour	○ 5700 K	
Powered by		Photovoltaic kit <b>20 W</b>
Autonomy	> <b>7 days</b> witho	ut sun
Trilogy material	Aluminum	adjustable bracket included
Dimensions	Trilogy: 80 x 9 Kit PV: 345 x	91 x 300 mm (w/o bracket) 400 x 175 mm



# TALOS N PHOTOVOLTAIC

With **PV lighting solutions**, you can bring light in areas not accessible from the power supply, reducing the installation costs by avoiding the laying of new cables.

Our systems are characterized by the use of top quality components and oversized to ensure the best reliability:

- Use a **regulator** to protect the batteries from deep discharge and overload.
- Specific **AGM Batteries** for photovoltaic applications.
- Compact kit with battery and **electronics** integrated.
- Dimensionsng based on latitude and output light required, offers a range of autonomy in the absence of sun between 5 and 10 days.

Other combinations available.

Talos N	Die-cast aluminum Supercast®	Tempered glass	IP66
Power cons.	14 W		
LED	○ 4000-5700 K	CRI >70	L80 >100.000 hrs
Photovoltaic kit		12 VDC 190 W	
Autonomy	510 days without sun		
Dimensions	Talos N: 270 x 500 x 106 mm (mounting Ø60 excluded) PV panel: 1480 x 670 x 35 mm		







# ADVANCED SAFETY SYSTEMS





### FIXED SAFETY DEVICES ADVANCED SAFETY SYSTEMS



### WRONG DIRECTION VEHICLE DETECTOR

# This system detects vehicles driving in the wrong direction using induction loops.

Photovoltaic power supply, 12 VDC or 230 VAC. Control cabinet containing the CPU for managing and storing events, GPS module and control unit for LED flashers. A **wireless** connection between the control cabinet and flashers is available.

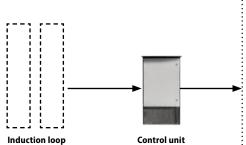
#### Features:

- Vehicle detection by inductive-loop traffic detectors
- Sends an SMS or E-mail in case of anomaly, mulfunction or low battery.
- the System is equipped with a modem that stores data of the wrong way events
- Different working logics are available together with different types of flashing for Basic 302/201/200 (50%,10% and triflash).
- Optional camera to send via E-mail or ftp the images or videos of the events.



Options:







Traffic light 0300





Watch the video:





**DETAS SpA** - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company



# RAV

### VEHICLE HEIGHT DETECTOR

The RAV is a system capable of detecting the height of vehicles in transit with only one sensor installed on the side of the road. If the sensor detects that the maximum allowed height has been exceeded, the system activates a pair of flashers, a siren, a traffic light or a fixed message panel.

The RAV is ideal for underpasses, tunnels, overpasses, or any another application where exceeding the maximum allowed height can be dangerous.

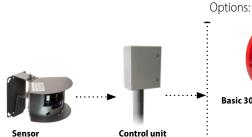
It is possible to define the length and width of the area of detection and the minimum size of the object to be detected.

It is possible to have a **wireless** connection between the control unit and sensor in addition to the standard connection with cables.

The system is powered at 230V.







**Control unit** 









LED traffic lights





Watch the videos:

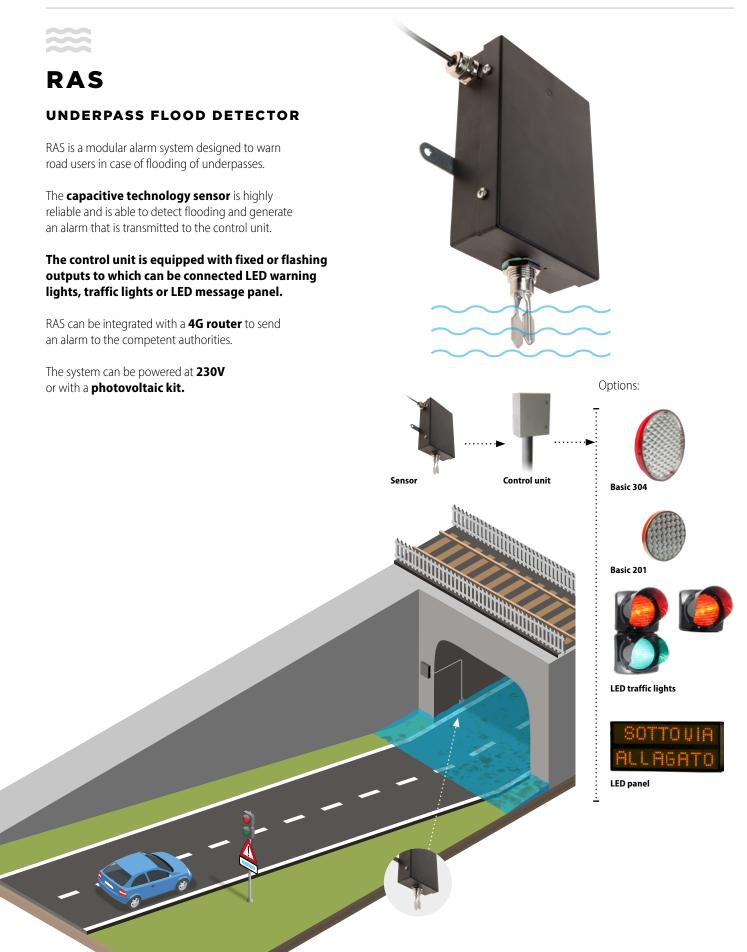
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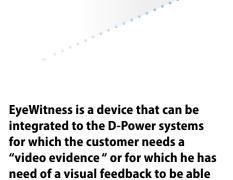




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### FIXED SAFETY DEVICES ADVANCED SAFETY SYSTEMS





EYEWITNESS

The system is activated by a contact generated by radar, laser or flooding sensor witch are present in our systems.

evaluate any alarm or notification.

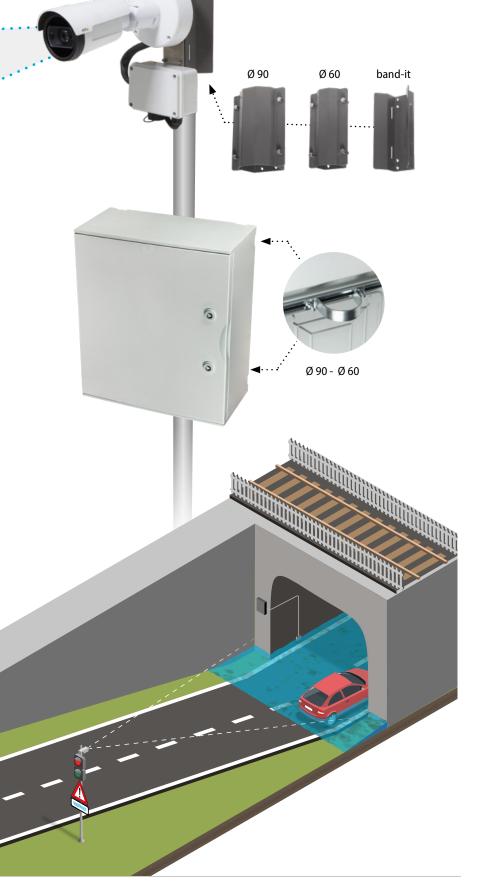
#### Features:

#### **Control Unit**

- Powered by 18Ah power supply/battery kit
- Modem CPU UMTS
- Discharge blocking circuit
- Surge protection and circuit breaker
- Camera activation with clean contact for connection to all in our systems

### Camera

- Mounting bracket for pole 60 mm, 90 mm or band-it
- Connection to the control unit via cable with connector







#### AT NIGHT AND IN POOR VISIBILITY HOURS, THE PEDESTRIAN CROSSINGS MUST BE PROPERLY ILLUMINATED AND SIGNALED:

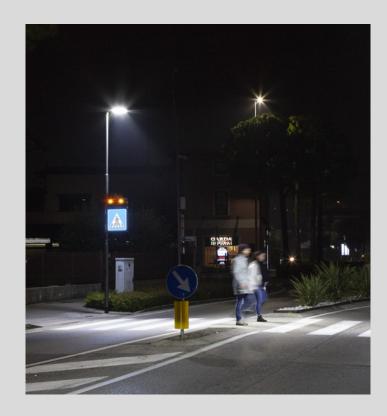
#### SIGNAL

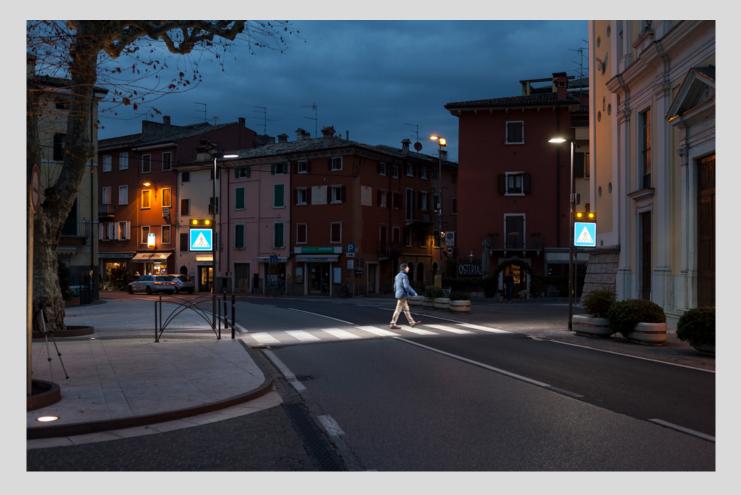
using LED flashers certified according to EN 12352 and LED backlit signals according to EN 12899.

#### ILLUMINATE

**an horizontal plan**, highlighting the crossing with a minimum recommended light level of 100 lux (average) **and a vertical plan**, lighting perfectly the body of pedestrians making them visible, starting from the waiting area, extremely important factor to prevent accidents on crossings.

The LED luminaires **Talos G and Talos N** have been designed with a dedicated optic specifically to illuminate crossings, creating a positive contrast between the pedestrian and the surrounding environment, producing a very **high vertical illumination** level according to **EN13201**.











### LUMINOUS FLUX [LUMEN]

The luminous flux is measured in lumens and represents the quantity of light produced from a fixture, hence it can't be measured on a point or surface. It is a task of the optics to distribute this light properly on the crossing. For instance, a light fixture producing 15,000 lm, may provide less light on the crossing of a fixture producing 12,000 lm.

#### ILLUMINANCE [LUX]

The illuminance is the quantity of light measurable on a plan of the crossing. It is measured in lux and in most of the cases the determining factor is the average illuminance and the overall uniformity (ratio between min lux and avg lux).

#### HORIZONTAL ILLUMINANCE EH [LUX]

Is the quantity of light measured on the horizontal plan [Eh] of the crossing. The high level achievable and the super concentrated beam allow an unmatched visibility and ease of **identification from distance of the crossing**.

#### VERTICAL ILLUMINANCE EV [LUX]

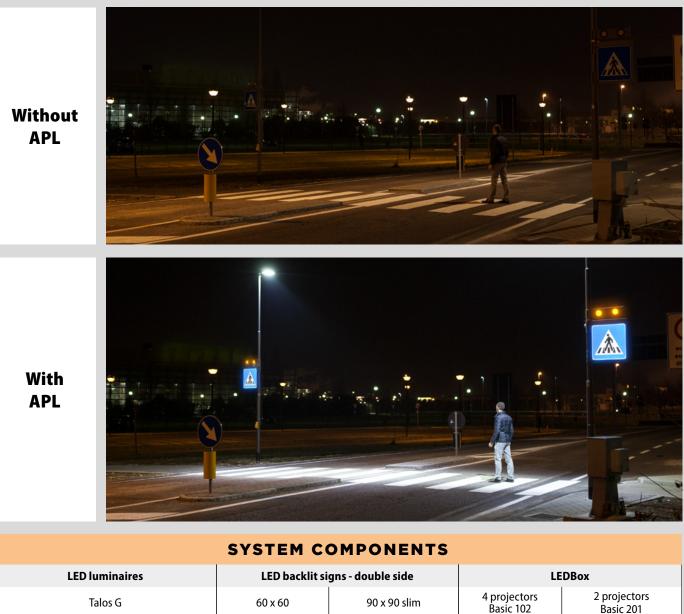
Is the quantity of light measured on the vertical plan [Ev] of the crossing. The high level achievable allows the **maximum visibility of pedestrians**, creating a positive contrast with the surrounding environment.





#### APL Classic is the signalling and lighting system of pedestrian

**crossings** designed to achieve a high level of safety for pedestrians. The flashers are always active, the lighting fixtures and the backlit signs work only at night.





Talos N







**Power supply** 







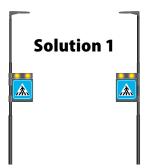


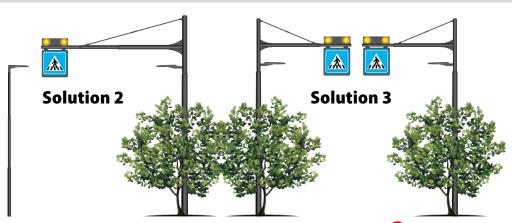
### APL CLASSIC 230

This system works at 230 V and it is mostly suited for applications where mains power is available at both sides of the road.

No cutting across the street required.







Solutions 2 and 3 are suitable for installations on roads with limits above 50 km/h (e.g. 100)

### APL CLASSIC-ELV

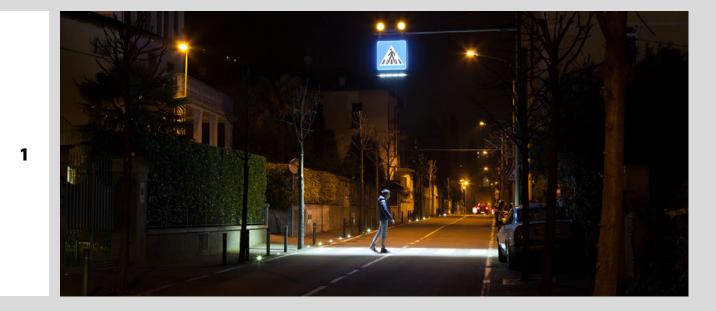
This is the Extra Low Voltage version that makes installation easier when mains power is available at one side of the road only.

Cutting of the street required.











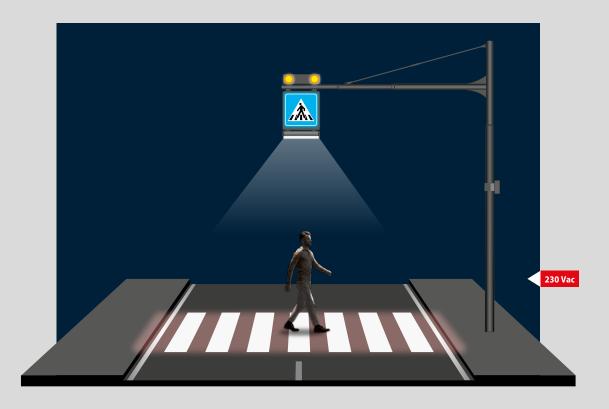


### SYSTEM COMPONENTS

LED luminaires	LED backlit signs - double side		LEDBox	Power s	upply
Trilogy N	90 x 90 slim	90 x 90 bold	2 projectors Basic 201	Power supply/ Battery kit	Kit Astro
Concernant of the second			•		5.5.5





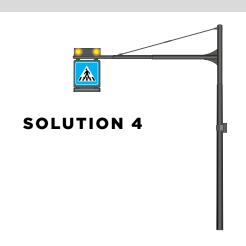


**The APL Classic SOLUTION 4** originated from a need to offer a product that can be used as a retrofit on old installations and for some applications where it is not possible to lay a pole on one side of the road.

This solution, however, does not comply with the **UNI/TS 11726** because it only guarantees good horizontal illumination but not the vertical one that is necessary to make the pedestrian visible.

As you can see in **picture 1** a pedestrian crossing exactly on the axis is visible even if not illuminated correctly. If the pedestrian crosses on another area (**picture 2**) for one traffic direction is going to be visible only thanks to the negative contrast that is created between its black shape and the background illuminated by the surrounding public lighting.

It is important to remember that, in order to prevent accidents, the pedestrian must be visible from the waiting areas and this solution does not reach an adequate level of vertical illuminance in such areas, especially on wide roads.



**Power Supply/Battery Kit** has been created for connection of the public lighting network (available only at night), in addition to a flashing module for the LEDBox (L50), it is equipped with a battery for operating the lights also during daytime.

**Kit Astro** has been created for connection to the 230V network (available 24 hours a day), and in addition to flashing module for the LEDBox (L50), it is equipped with an astronomical switch that turns off the backlit sign and LED light fixtures during daytime.





### APL Smart is the latest evolution of **signalling and lighting of pedestrian**

**crossings** created to make them interactive and safer. The system is activated by button or motion sensor, increasing the lighting level on the crossing from 40% to 100% and turning on the LED flashers.



	SYSTEM C	OMPONENTS		
LED luminaires	LED backlit signs - double side		LEDBox	
Talos G	60 x 60	90 x 90 slim	4 projectors Basic 102	2 projectors Basic 201
				•
ALC: NO	Cont	trol unit	Activati	on devices
	APL Smart ELV	APL Smart Wireless 230	Sensor and push-button	Touch-button

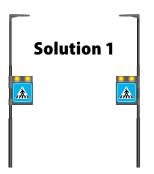


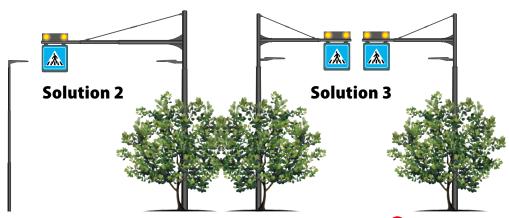


### APL SMART-ELV

This is the Extra Low Voltage version that makes installation easier when mains power is available at one side of the road only. Cutting of the street required.







Solutions 2 and 3 are suitable for installations on roads with limits above 50 km/h (e.g. 10)

### APL SMART WIRELESS 230

This system works at 230 V and it is mostly suited for applications where mains power is available at both sides of the road. No cutting across the street required.

The communication between control units is wireless.









APL Solar combines the technological advantages of our APL solutions with the need to install such **systems in areas not covered by the AC grid**.





### SYSTEM COMPONENTS







### APL SOLAR

Even if with lower power comparing to AC APL (APL Classic and APL Smart), the APL SOLAR (with Talos N) can guarantee sufficient **horizontal and vertical illuminace** levels in compliance with the **EN 13201** and a good warning system thanks to the LED warning lights certified and approved according to **EN 12352**.

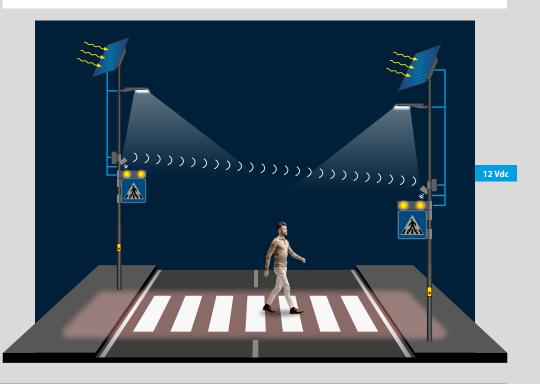
In the **Photovoltaic Kit** battery and charging regulator are integrated with the PV module. In this way we can avoid to use an external box. Peak power **190 W.** 





### APL SOLAR ACTIVE

- Lighting is activated automatically at night to allow a basic safety level and makes the crossing visible to drivers and pedestrians
- The LED flashers are activated by **push button or motion sensor**. A wireless connection activates immediately the flashers of the opposite side







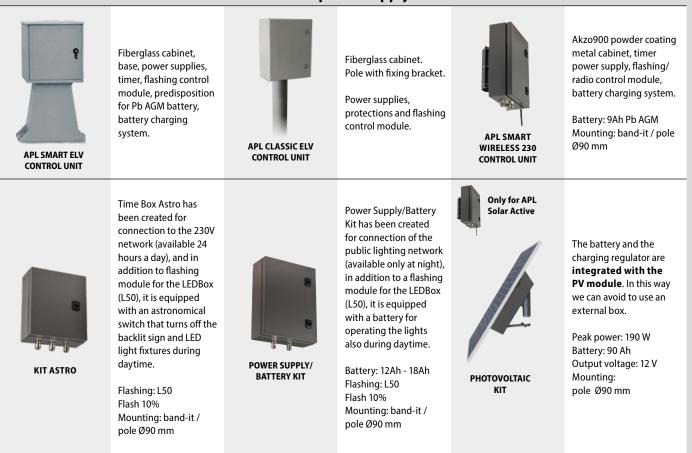
		Compliance	EN13201			
		LED optic	Asymmetric L - R Specific for pedestrian crossing		crossing	
12		<b>LED luminaires</b> with dedicated double	lnput voltage	230 VAC	24 VDC	12 VDC (APL Solar)
TALOS G		asymmetric optic targeting the highest	Power cons.	TALOS G TALOS N	137 W 68 W	<b>19 W (</b> APL Solar)
	R	classes EV of the EN13201.	Material	Die-cast aluminun	n SUPERCAST®	
THE P			Mounting	Ø60		
TALOS N			Dimensions	TALOS G TALOS N	690 x 360 x 225 mm 500 x 260 x 195 mm	
			Compliance	UNI EN13201		
		LED bar specifically designed for	LED optic	Symmetric Specific for pedestrian crossing		
		<b>pedestrian crossing.</b> The narrow optic is able	lnput voltage	230 VAC	12 VDC	
THIOCKAN	to deliver very high horizontal values on the zebra crossing. It is used	Power cons.	45 W			
THEOGT N		in combination with 90x90 backlit signs.	Material	Aluminum	Adjustable bracket ir	ncluded
			Dimensions	80 x 91 x 1000 mm	(w/o bracket)	
			Compliance	EN12899		
			LED colour	$\bigcirc$ Double side		
Â		Our <b>backilluminated</b> LED signs are	Model	Double side BOLD	Double side SLIM	Double side flag
	Ŵ	extremely important to make the pedestrian crossing visible from	Light emission area	90 x 90 cm	90 x 90 cm	60 x 60 cm
DOUBLE SIDE DOUBLE		long distances. The perfect uniformity and luminance values of the	lnput voltage	230 VAC	230 VAC - 12 VDC	230 VAC - 12 VDC
90X90 SLIM 90X90 E		signs are our competitive advantage.	Power cons.	230 VAC - 42 W	230 VAC - 54 W 12 VDC - 48 W	230 VAC - 40 W 12 VDC - 25 W
	The backilluminated sign LED 90x90 can be equipped with lower LED Trilogy bar.	Mounting	Tilting system	Tilting system	Ø60 - Ø90 mm Band-it	
		Dimensions [mm]	1065X1240X200	1000X1140X63	646X730X63 (bracket excluded)	
DOUBLE SIDE			Code figure's application	silk-screened polycarbonate glass	Class II superior translucent films	Class II superior translucent films
60X60						





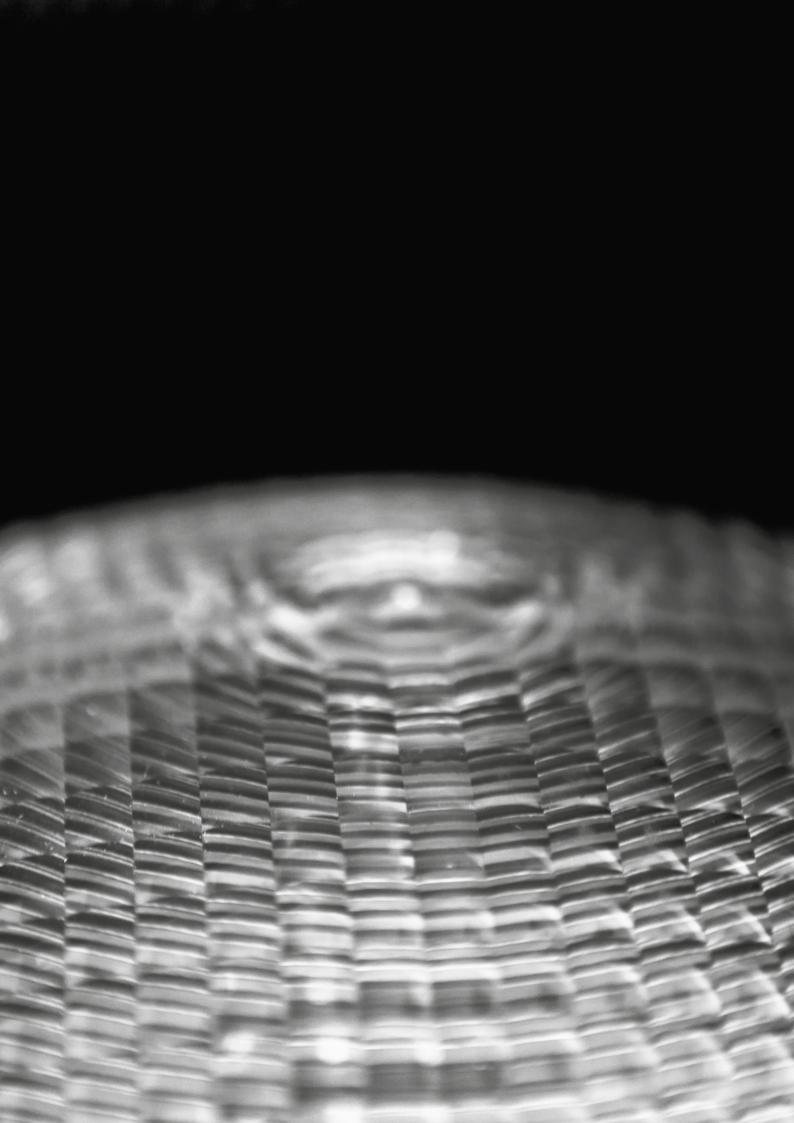
LEDBOX BASIC 102		<b>LEDBoxes</b> are devices with certified LED projectors to be combined with our backlit to increase visibility of the pedestrian crossing especially during the daytime.	Certification	Basic 102 Basic 201	EN12352 - L2H EN12352 - L8H
			LED colour	•	Basic 102 x 4 (single side) Basic 201 x 2 (double side)
LEDBOX BASIC 201	lnput voltage		230 VAC	12 VDC	
	Power cons.		Basic 102 Basic 201	15 W 15 W	
	Fixing		Pole	Ø60 - Ø90 Band-it	
	Box dimensions		645 x 160 600 x 160 900 x 210	x 60 mm (APL Solar)	
SENSOR AND TOUCH-BU	SOR AND TOUCH-BUTTON	<b>Activation devices.</b> The sensor and the buttons	Certification	CE	
PUSH-BUTTON		make the system interactive and safer.	lnput voltage	12 VDC	

### Control and power supply units





# FOR ROAD WORK







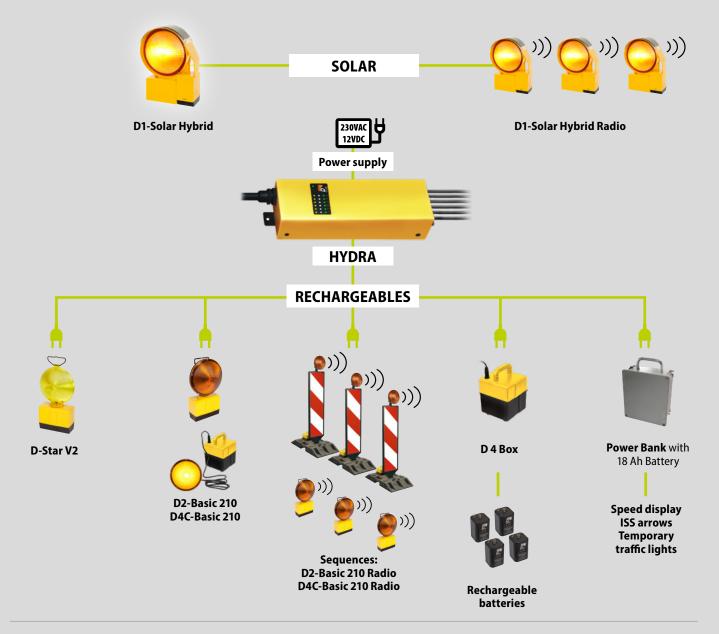


**Waste management** and disposal are increasingly important matters for environment protection and most of the times high costs are involved with them. The poor average quality of products on the market results in shorter lifetimes, and the use of imported non-rechargeable batteries and other difficult to dispose materials makes the problem even worse from the ecologic and economic standpoint.

Detas SpA created **Clean Power**, an eco-label that distinguishes products that, while guaranteeing high performance standards, are characterised by a reduced environmental impact throughout their entire life cycle.

CleanPower identifies both a line of products for **temporary signalling,** including hybrid solar beacons and rechargeable products, and all those products linked to permanent signalling which, due to the characteristics of the materials used, construction and power supply, are designed to increase their lifecycle in a sustainable perspective.

We believe that providing high quality products that can **last longer** and be easily maintained is the solution to the problem and we hope that this will help the environment and at the **same time** help our customers **save money and time**.





DETAS SpA - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company

# LED LIGHTS For road work





Basic 210 is a LED warning light for temporary use.

It is available in different models and it is suitable for all the applications where there is a need to warn, inform or guide road users.

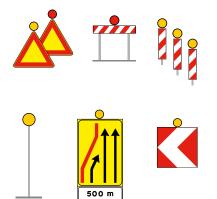
Certification	EN12352 L8H - L8M
Input voltage	12/24 VDC
Colour	•••
Max. power consumption	6 W
Dimensions	Ø 210 x 85 mm

Flashing	Power cons. @12V		
Flash LED (10%)	1.2 Ah	/day	
Tri Flash (5%+5%+5%)	1.8 Ah	/day	
Single (50%)	6 Ah	/day	
Steady	12 Ah	/day	











Some examples of applications:



**DETAS SpA** - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company



Basic 211 is the flat version of the Basic 210.

It is available in different models and it is suitable for all the applications where there is a need to warn, inform or guide road users.

Certification	EN12352 L8H - L8M
Input voltage	12/24 VDC
Colour	
Max. power consumption	6 W
Dimensions	Ø 210 x 55 mm

Flashing	Power cons. @12V		
Flash LED (10%)	1.2 Ah	/day	
Tri Flash (5%+5%+5%)	1.8 Ah	/day	
Single (50%)	6 Ah	/day	
Steady	12 Ah	/day	



Some examples of applications:





**DETAS SpA** - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company







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info@d-power.com

D-POWER.COM

Basic 308 is a LED warning light for temporary use.

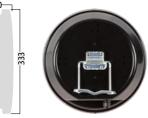
The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.

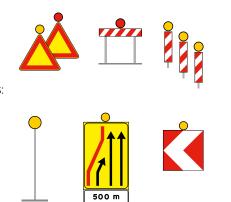
Compliance	EN12352 L9M
Input voltage	12 VDC - 12/24 VDC
Colour	•
Max. power consumption	17.5 W
Dimensions	Ø 333 x 110 mm

Flashing	Power cons. @12V		
Flash LED (10%)	3.0 Ah	/day	
Tri Flash (5%+5%+5%)	4.5 Ah	/day	
Single (50%)	15 Ah	/day	
Steady	30 Ah	/day	











Some examples of applications:



**DETAS SpA** - D-Power division Via Treponti, 29 - 25086 Rezzato (BS) ITALY ISO 9001 - ISO 14001 certified company

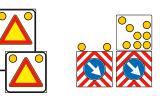


Basic 309 is the flat version of the Basic 308.

The high luminous efficiency, the uniformity and the wide visual angles, make this product the best in its category.

Compliance	EN12352 L9M
Input voltage	12 VDC - 12/24 VDC
Colour	•
Max. power consumption	17.5 W
Dimensions	Ø 333 x 64 mm

Flashing	Power cons. @12V		
Flash LED (10%)	3.0 Ah	/day	
Tri Flash (5%+5%+5%)	4.5 Ah	/day	
Single (50%)	15 Ah	/day	
Steady	30 Ah	/day	



Some examples of applications:











# LED WARNING LIGHTS







It is an advanced modular battery charger and main element of the CleanPower eco-line, capable of charging up to 6 different devices at the same time. It automatically recognizes the battery voltage and signals the charging state. It is able to independently distinguish and set the charge levels for AGM and lithium-iron-phosphate batteries, and for 6 Vdc and for 12 Vdc batteries.

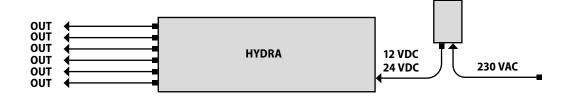
### ON THE ROAD OR AT YOUR COMPANY

Thanks to the connectors compatible with all the CleanPower line, Hydra allows you to recharge all products both from the vehicle (12/24 Vdc) and from a fixed location (230 Vac).

Input	10 ÷ 30 VDC
Output current	up to 2 A x 6
Output	AGM battery - LiFePO4 6 VDC/ 12 VDC
Connections	cables with connectors compatible with the lines D-Star, D1, D2 e D4



**230V** mains power supply kit, in IP56 enclosure, available in Class II.







### D-STAR V2

### LED WARNING LIGHT MONO-BATTERY.

Unbreakable lens. Works with 1 or 2 **6V 4R25** batteries. Easy to replace battery. Anti Theft metal bracket included. Other colours on request.

Operating		Standard				FlashLED	Super
mode		Flas	hing	ing Steady		FIGSTILED	FlashLED
Approved EN 12352			L7	L6	L7	L8G	L8L
Colour		$\bigcirc$	0	••	•	0/00	0
	7Ah	800	1000	250	500	400 / 200	300
Operating time [hours]	25Ah	2800	3300	900	1800	1500 / 750	1100
	50Ah	4500	6600	1800	3600	3000 / 1500	2200
Dimensions		195 x 380 x 95 mm					





### D-SOLO

### LED WARNING LIGHTS.

Unbreakable lens. Works with 1 **6V 4R25** Battery. Metal bracket, rechargeable version and other colours on request.

Operating mode		Flas	hing	Steady	
Approved EN 12352		L6 L7		L6	L7
Colour		$\sim$	0	••	•
Operating time [hours]	7 Ah 25 Ah 50 Ah	400 1400 2300	500 1700 3300	130 450 900	250 900 1800
Dimensions		195 x 360 x 105 mm			





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### LED WARNING LIGHT.

Imported model not in compliance with **EN 12352**. Metal Bracket on request.

Operating mode		Steady or flashing		
Certification		CE (Non compliance EN 12352)		
Colour			$\bigcirc$	••
Operating time [hours]	7 Ah		700	260
Dimensions		185 x 330 x 90 mm		



### MONO D-LITE

### LED WARNING LIGHT.

Imported model not in compliance with **EN 12352**. Metal Bracket on request.

Operating mode		Steady or flashing		
Certification		CE (Non compliance EN 12352)		
Colour			$\bigcirc$	••
Operating time [hours]	7 Ah		350	130
Dimensions			180 x 330	x 105 mm





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# D1-SOLAR HYBRID

From our twenty-year experience on photovoltaic technologies, it comes the D1-Solar Hybrid, an innovative roadworks lamp capable of combining performance and environmental responsibility.

#### The best from both power supplies.

D1-Solar Hybrid is equipped with a double power supply: **photovoltaic (with lithium battery) and with 4R25 battery.** 

The system automatically alternates between one or the other to offer the best in terms of power, efficiency and autonomy. **Always ready for use:** the possibility of using the traditional battery also allows you to use the lamp immediately without waiting for solar recharge.

#### Self-sufficient in the twilight version:

the D1-Solar Hybrid is completely autonomous and can operate for up to 5 years without the need to replace the internal lithium battery.

**Greater autonomy:** in the more powerful radio version, which work 24 hours, the photovoltaic power supply allows, in optimal solar conditions, to triple the normal autonomy of the non-rechargeable battery.







Operating		Standard				
mode	Flash	ning	Fixed		FlashLED	
Approved EN 12352	L6	L7	L6	L7	L8L	
Colour	$\sim$	0	••	•	•	
Fixing mode	• Pole fo • Panel v	• Pole for 60 mm • Pole for 48 mm • Panel white/red • Bracket				
Dimensions		250 x 335 x 100 mm				

#### **Warning Panel**

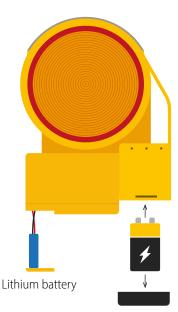
- Dimensions 290 x 1330 x 50 mm
- Without film
- With double sided film EG class 1
- With double sided film HI class 2







### D1-SOLAR HYBRID - FOCUS



QUICK START MODE

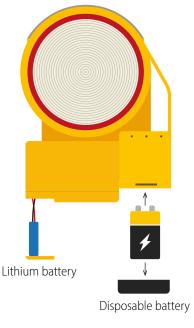
D1-Solar Hybrid L6 - L7 This is how the D1 Solar Hybrid L6 and L7 lamps work **with twilight function** (night only): yellow, red, single-sided and double-sided.

The lamp only needs a disposable battery to start if the built-in lithium battery is flat, after that it is completely autonomous and does not require further battery changes. **It does not need a disposable battery to operate**, so we recommend the use of **flow amperage disposable batteries.** 



Disposable battery until exhaustion

Photovoltaic with lithium battery

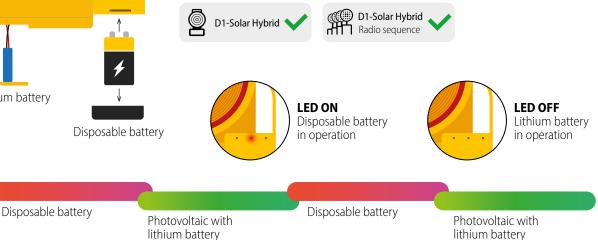


### COMBO MODE

D1-Solar Hybrid FlashLED L8G - Radio L8L

This is how the D1 Solar Hybrid L8G and Radio L8L lamps operate, with day and night function (single-sided only).

The lamp **works only if a disposable battery is also inserted**, the solar panel and the lithium battery are not sufficient to guarantee the functioning of the lamp but they help increasing the autonomy of the disposable battery, therefore the use of **disposable batteries with high amperage** is recommended.

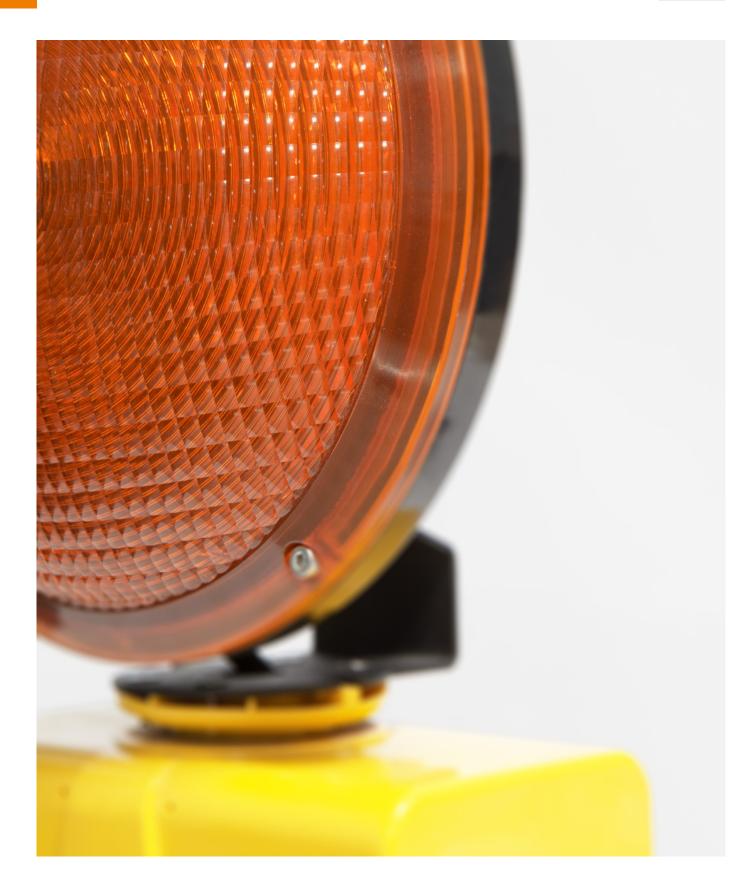




FOR ROAD WORK

# HIGH POWER LED WARNING LIGHTS





### D2-BASIC 210

# ADVANCE WARNING LED LIGHTS.

Single flash. Wide range of settings. Possibility of twilight function. Works with 2 batteries 6V 4R25.

Certification EN 12352		L8H - L8M
Colour		•
Operating time [hours]	7Ah	150
	50Ah	1000
Dimensions		210 x 370 x 113 mm



### D4C-BASIC 102

#### ADVANCE WARNING LED LIGHTS.

Single flash. Wide range of settings. Possibility of twilight function. Works with 4 batteries 6V 4R25.

Certification EN 12352		L2H
Colour		•
	4 batt. <b>7Ah</b>	400
Operating time [hours]	4 batt. <b>50Ah</b>	2850
	1 batt. <b>550Ah</b>	15000
LED light dimensions		Ø 139 x 19 m
Box dimensions		150 x 165 x 235 mm







### D4C-BASIC 210

#### ADVANCE WARNING LED LIGHTS.

Single flash. Wide range of settings. Possibility of twilight function. Works with 4 batteries 6V 4R25.

Certification EN 12352		L8H - L8M
Colour		•
	4 batt. <b>7Ah</b>	300
Operating time [hours]	4 batt. <b>50Ah</b>	2000
	1 batt. <b>550Ah</b>	<b>11500</b> (480 days)
LED light dimensions		Ø 210 x 85 mm
Box dimensions		150 x 165 x 235 mm



### D4C-BASIC 308

#### ADVANCE WARNING LED LIGHTS.

Single flash. Wide range of settings. Possibility of twilight function. Works with 4 batteries 6V 4R25.

Certification EN 12352		L9M
Colour		•
	4 batt. <b>7Ah</b>	110
Operating time [hours]	4 batt. <b>50Ah</b>	800
	1 batt. <b>550Ah</b>	<b>4400</b> (180 days)
LED light dimensions		Ø 333 x 110 mm
Box dimensions		150 x 165 x 235 mm





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# LED SEQUENTIAL LIGHT SYSTEMS







### BATTERY RADIO SEQUENCE

### D1-RADIO

# LED SEQUENCE LIGHT SYSTEM WITH WIRELESS RADIO TECHNOLOGY.

Min. Distance system light 1 m, max 40 m. **1 battery.** No lights limit. Available functions: twilight switch, night guide light.

Certification EN 12352	L8L
Colour	•
Power supply	1 battery 6V 4R25
Fixing	• Pole for 60 mm • Pole for 48 mm • Panel white/red • Bracket
Dimensions	250 x 335 x 100 mm



### BATTERY RADIO SEQUENCE

D2-BASIC 210

# LED SEQUENCE LIGHT SYSTEM WITH WIRELESS RADIO TECHNOLOGY.

Min. Distance system light 1 m, max 40 m. **2 battery.** No lights limit.

Available functions: twilight switch, night guide light.

Certification EN 12352	L8H - L8M		
Colour	•		
Input voltage	12 V		
Operating time	7 Ah: <b>140 h</b>	50 Ah: <b>1000 h</b>	
Fixing	Pole 48 o 60 mm		
Dimensions	210 x 370 x 113 mm		





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#### BATTERY RADIO SEQUENCE

### D4C-BASIC 210

# LED SEQUENCE LIGHT SYSTEM WITH WIRELESS RADIO TECHNOLOGY.

Min. Distance system light 1 m, max 40 m. **4 battery.** No lights limit. Available functions: twilight switch, night guide light.

Certification EN 12352	L8H - L8M	
Colour	•	
Input voltage	12 V	
Operating time	7 Ah: <b>280 h</b>	50 Ah: <b>2000 h</b>
Fixing	Panel adapter, Pole 48 o 60 mm	



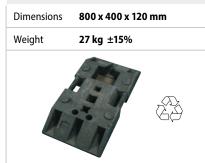
This model is highly recommended for road works that require longer operating time and more powerful LED lights.

#### Signalling panel

Dimensions	290 x 1330 x 50 mm
• Without film	
• With double s	ide EG class 1 film
• With double s	ide HI class 2 film



#### Base in recycled rubber







### HYBRID RADIO SEQUENCE D1-SOLAR HYBRID

# LED RADIO SEQUENCE WITH SOLAR TECHNOLOGY.

Thanks to the contribution of solar panels, in optimal solar conditions, the autonomy of the radio lamp can triple the normal autonomy of the non-rechargeable battery.

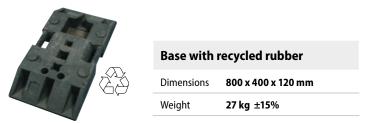




Approved EN 12352	L8L
Colour	•
Litihum battery	3,2 V - 4,5 Ah
Fixing mode	• Pole for 60mm • Pole for 48mm • Panel white/red • Bracket
Dimensions	250 x 335 x 100 mm

Warning Panel
---------------

- Dimensions 290 x 1330 x 50 mm
- Without film
- With double sided film EG class 1
- With double sided film HI class 2





#### CABLE SEQUENCE

# **BASIC 210**

#### LED SEQUENCE LIGHT SYSTEM SELF-CONFIGURING.

All the lights are the same model. Electronic control integrated into the lights.

Standard day and night operation. on request only night.

12V standard 230/12V input on request.

Certification EN 12352	Basic 210: L8H - L8M
Sequence type	Self-configuring
Colour	•
Input voltage	12 V
Connection cables	6 - 13 - 19 - 25 - 39 m
Power supply cable	10 m
Fixing	Panel adapter, bracket for 48 o 60 mm pole





#### **Signalling panel**

Dimensions	290 x 1330 x 50 mm
Without film     With double s	ide EG class 1 film
• With double s	ide HI class 2 film

#### **Battery case**

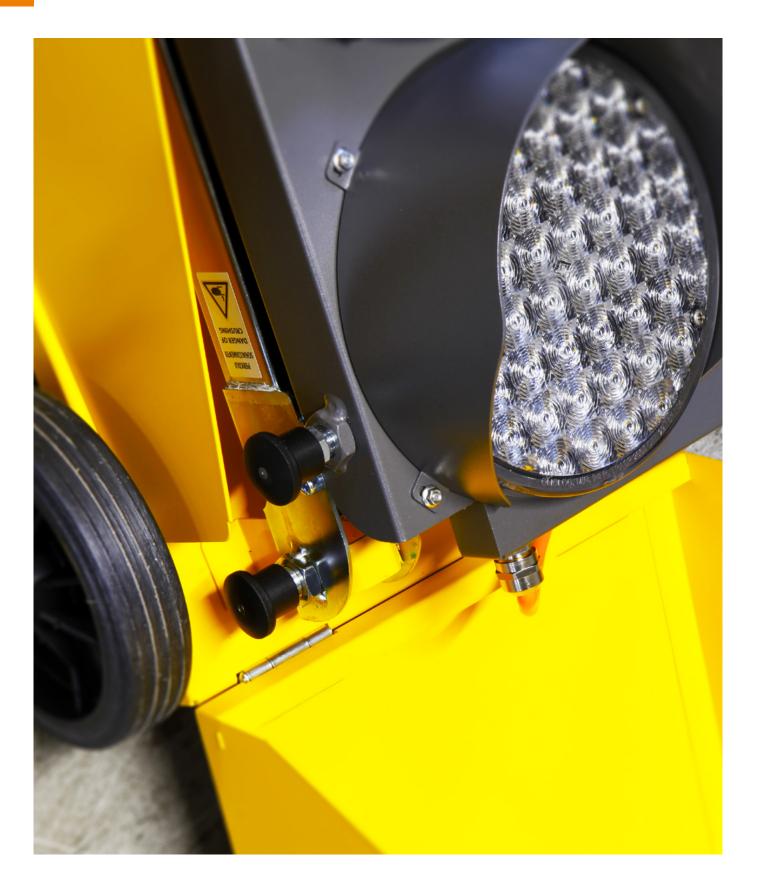






# MOBILE LED TRAFFIC LIGHTS





### SL19

#### TEMPORARY LED TRAFFIC LIGHTS.

The SL19 model is completely foldable, and allows you to place the traffic light inside the cart.

Colour				
Projectors		3 x Basic 211 (standard)	3 x Basic 201 (high visibility)	
Power cons.		3 W 7,8 W		
Dimonsions	Closed	780 x 440 x 410 mm		
Dimensions Open		780 x 440 x 1880 mm		
Adjustable height		1630 x 1755 x 1880 mm		



# SL16

#### TEMPORARY LED TRAFFIC LIGHTS.

This feature makes the product more compact and protects the traffic light during transportation.

Colour				
Projectors		2 x 200 mm 3 x Basic 21 1 x 300 mm 1 x Countdow		
Power cons.		3 W	5,5 W	
Closed		885 x 440 x 980 mm 940 x 440 x 730 mm		
Dimensions	Open	787 x 455 x 2200 mm 720 x 455 x 2210 mm		
Adjustable height		1950 x 2075 x 2200 mm 1960 x 2085 x 2210 mm		
Version with 300 mm red traffic light lantern		Counto	down version	
мрв 🗸		мрв 💊	DUAL Y	

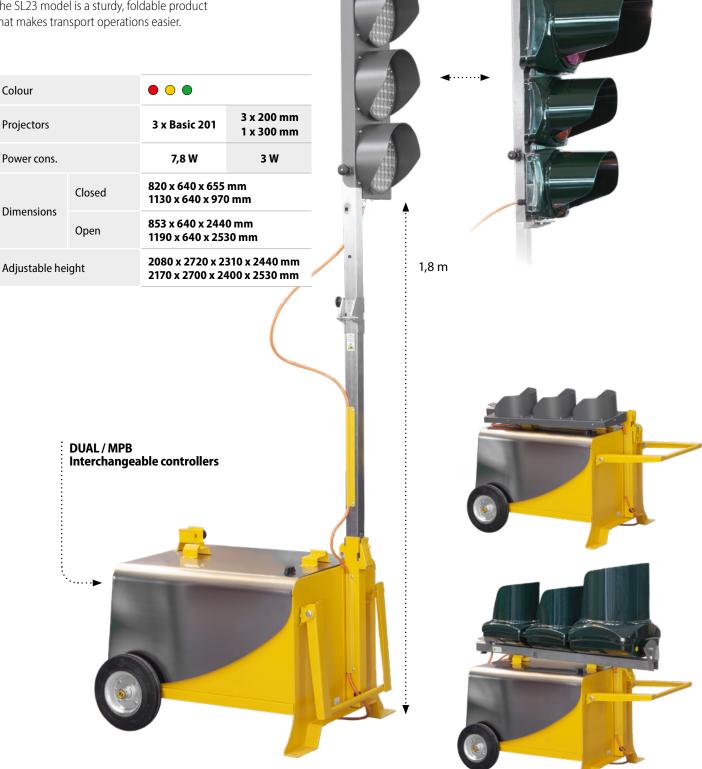




### **SL23**

#### **TEMPORARY LED TRAFFIC LIGHTS.**

The SL23 model is a sturdy, foldable product that makes transport operations easier.







### DUAL

#### ELECTRONIC CONTROLLER.

Quartz synchronization. Each control unit manages one traffic light.

#### 4 operating modes:

- automatic
- flashing
- manual
- standby (off without losing the synchronization).

Usable only for alternate one-way.





### MPB

#### ELECTRONIC CONTROLLER.

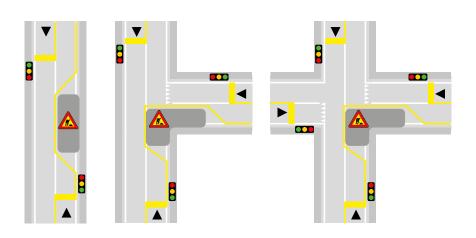
Each remote control manages up to **4 groups of 4 traffic lights**.

#### 4 operating modes:

- automatic
- flashing
- manual
- standby (off without losing sync).

# Usable for alternate one-way, T intersection and 4-way intersection.







### **SL16 MANUAL**

#### TEMPORARY LED TRAFFIC LIGHTS

IThe devices is equiped with a **wireless remote control** to activate manually the green or the red light. The LED beacon placed on top of the traffic light is visible at 360° and it's connected to the red phase as a feedback for the operator using it. It is ideal for all situations where vehicle traffic management is not regular and must therefore be manually adjusted:

Temporary stopping the traffic to allow the exit of vehicles from a construction site, pedestrian crossing near schools, etc.

Colour			<ul> <li>(series 211)</li> <li>(series 400 LED)</li> </ul>		
Projectors		3 x Basic 211	Series 400 LED		
Power cons.		3 W	10,8 W		
Dimensions	Closed	980 x 440 x 640	) mm		
Dimensions Open		787 x 440 x 221	5 mm		
Adjustable height		1965 x 2090 x 2	1965 x 2090 x 2215 mm		





#### 3 configurations available:

**SL16 MANUAL** (default setting) Using the remote control you switch **from red to green manually.** 

#### SL16 MANUAL RESTART RED (on request)

Always red e and when you press the remote button it turns green for a few seconds.

#### SL16 MANUAL RESTART GREEN (on request)

Always green and when you press the remote button it turns red for a few seconds.











# INDICATOR FLAT 3 SL16

**RADAR BASED,** it is the ideal active signal to encourage safe driving in road working zones, motorway intersections, etc.

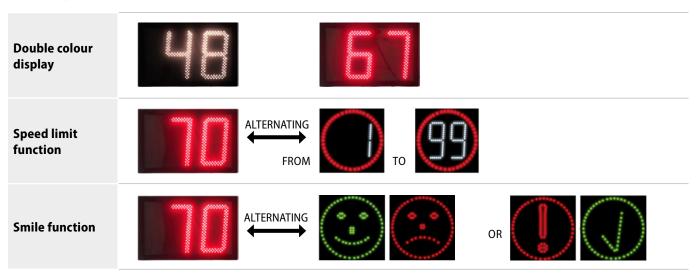
All the options can be deactivated allowing to use the device in standard mode (only amber).



Colour					
Digit height max.		30 cm			
Functions		Smile + speed limit			
Operating time 90 Ah battery		<b>Up to 35 days</b> (consumption depends on traffic volume)			
Software		Included / App Android			
Connection		Bluetooth (100m outdooor)Optional: e-mail-GSM-GPRS-GPRS232			
Vehicle detec	tion	Bidirectional (only statistic)			
Display dimensions		640 x 410 x 75 mm			
Dimensions	Close	780 x 440 x 601 mm			
DITICITISIONS	Open	780 x 440 x 1850 mm			



Some examples of views:





### WAVE

#### FOLDABLE ELECTRONIC FLAG WEAVER,

The Wave electronic flag- weaver is equipped with a foldable mobile trolley complete with a sign designed to assume different configurations (deviation to the right or to the left).

Wave works with a 12V commercial type automotive battery positioned inside the battery compartment.

Wave's compact structure makes handling, transport and installation operations easy on the construction sites.



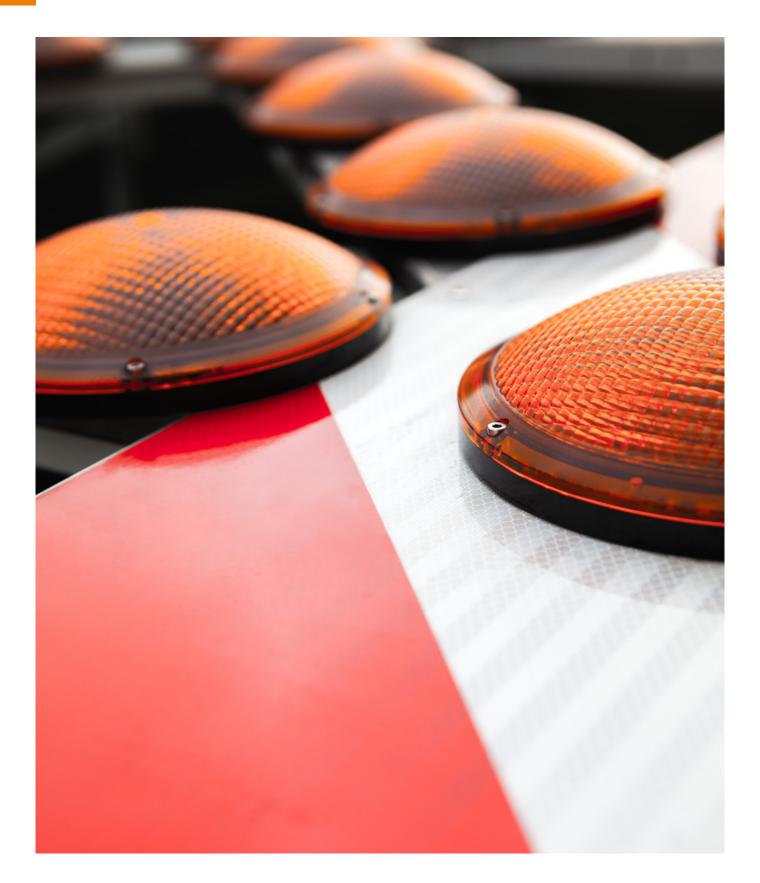
					_
Colour		•			
Projectors		Basic 211	Basic 309		
Power cons.		24 W	25 W		
Dimensions	Close	1055 x 490 x 545 m	ım		
Dimensions	Open	775 x 490 x 1485 m	ım		

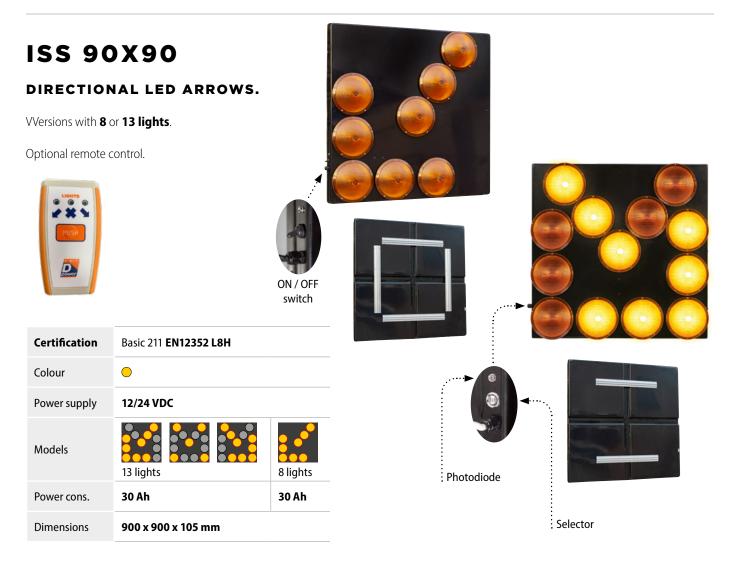


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# LIGHT TRAILERS AND DIRECTIONAL ARROWS







### ISS 60X60

			🌞 👝	0		
Certification	Basic 102 EN12352 L2H		<u> </u>	Ph	notodiode :	0 🕺 🔘
Colour	•		( <u>)</u>		· · ·	
Power supply	12 VDC 24 VDC on request			Ì. E		
Models	13 lights	8 lights				
Power cons.	28 Ah	28 Ah			Coloctor	• •
Dimensions	600 x 600 x 65 mm		·		Selector	
				ON / OFF		





### ISS 90X90 E

### DIRECTIONAL LED ARROWS WITH ELECTRICAL MOTORIZATION.

**13 lights** Basic 211.

**Electric scrolling**. With fig.398.

Optional motorized arrow.



With external control unit included







R

Certification	Basic 211 EN12352 L8H
Colour	•
Power supply	12 VDC
Models	13 lights
Power cons.	30 Ah/day
Dimensions [mm]	1070 x 1140 (1840 esteso) x 300 (+ 80 staffe)







#### MOTORIZED LIGHT TRAILER COMPLETELY AUTOMATIC.

- Fig. 400 o fig.401 with vertical lifting
- Galvanized steel frame
- GVW max. 750 kg
- Aluminum signalling frame
- Closed case to house the batteries
- Adjustable shaft in height with repulsion
- Aluminium panels with Reflective Film Cl II
- Wireless remote control on request
- Fig.401:

#### 23 - Basic 211 LED 2 - Basic 304 LED

• Fig.400:

Certification

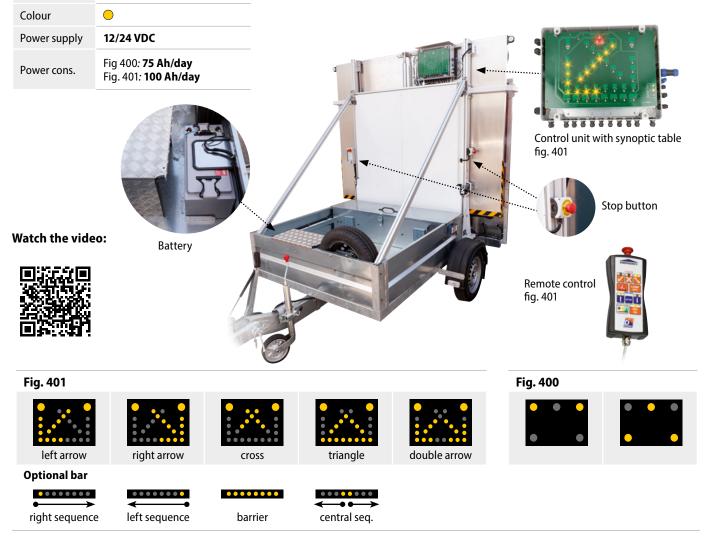
5 - Basic 304 LED.

Basic 211 EN12352 L8H

Basic 304 EN12352 L9H









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#### **MOTORIZED STRUCTURE** COMPLETELY AUTOMATIC.

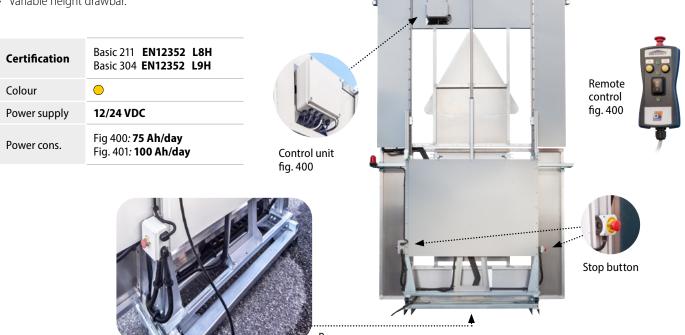
- Fig. 400 o fig.401 with vertical lifting
- Galvanized steel frame
- Aluminum signalling frame
- Aluminium panels with Reflective Film Cl II
- Wireless remote control on request
- Fig. 401:
  - 23 Basic 211 LED
  - 2 Basic 304 LED
- Fig. 400:
  - 5 Basic 304 LED.

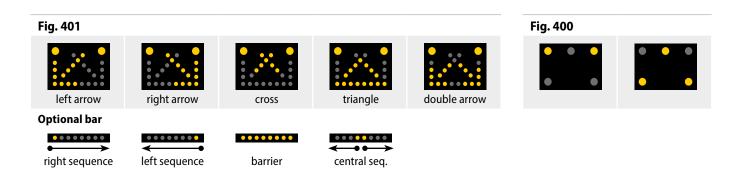
500 m

500 m

#### Signage trolley

- load-bearing frame
- MCPC max. kg 750
- Battery box
- Variable height drawbar.





Base





### FIG. 400 - FIG. 401

#### LIGHT TRAILER AND STRUCTURE WITH MANUAL LIFTING.

- Available with signalling panel fig.400 o fig. 401
- Aluminum signalling frame
- Aluminium panels with Reflective Film Cl II
- Optional remote control
- Fig.401:

### 23 - Basic 211 LED

- 2 Basic 304 LED • Fig.400:
  - 5 Basic 304 LED.

#### **Light Trailer**

- Galvanized steel frame
- GVW max. 750 kg
- Closed case to house the batteries
- Adjustable shaft in height with repulsion.





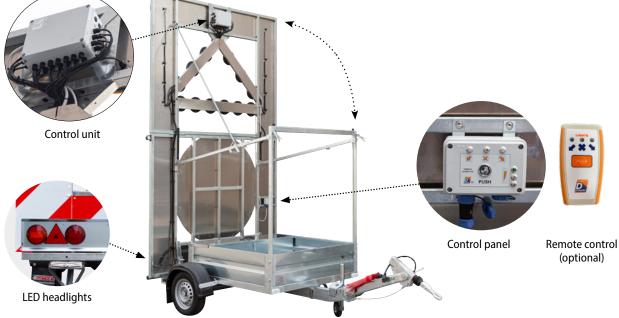


Fig. 401

Certification	Basic 211 EN12352 L8H Basic 304 EN12352 L9H	
Colour	•	left arrow
Power supply	12/24 VDC	Fig. 400
Power cons.	Fig 400: <b>75 Ah/day</b> Fig. 401: <b>100 Ah/day</b>	





right arrow





LED beacon

Slave 1B

Speaker

Sensor

Slave 1A

### **RAV MOBILE**

#### HEIGHT VEHICLE DETECTOR FOR ROAD WORK ZONE.

RAV Mobile is a system that detects the height of vehicles in transit to protect bridges or overpasses during maintenance operations.

### Each module is equipped with fixed or flashing outputs.

**Speakers** and **360** ° **LED beacons** can be connected to a RAV Mobile module in order to promptly alert the workers in the working area. It is possible to define length and width of the detection area and also the minimum size of the object that has to be detected.

#### Programmable with IR remote control.

Max. detection 25 x 25 m area Module Wireless - max. distance 1 km connections 230VAC 12VDC Powered by + -@ 12 V Power supply Battery Photovoltaic kit Control unit 2.4 W (200 mA @12 V) consumption



Master 1

# BATTERIES AND ACCESSORIES





Rechargeable D4 box	
Box dimensions	153 x 163 x 227 mm
Battery charger dimensions	155 x 72 x 46 mm

	Batteries	4R 25 6V
	Packing weight	Packing
7 Ah 50 Ah	11,5 Kg 14,5 Kg	24 pz. 15 pz.
<b>5 Ah</b> rechargeable	0,8 kg	1 pz.







Battery tester	
Dattery tester	

550 Ah - 12 V	19.8 kg
0% Cd - 0% Hg	Light Cheap Compact

For warning lights up to 1 year autonomy and for sequence systems.





**Rechargeable batteries** 

**12 V - DEEP CYCLE AGM** 





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### LED TORCHES



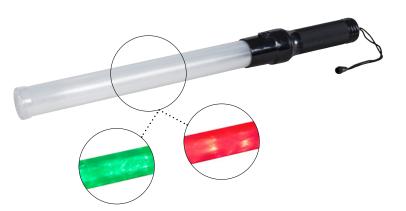


### LED TORCH

#### DOUBLE COLOR LED TORCH.

Compliant with technical standards C.d.S. art. 181 (art. 43 C.d.S.) in red light mode.

Power supply	2 D type batteries (excluded)
Type of light	Red: static and flashing Green: static
Operating time	> 120 hours (flashing)> 60 hours (steady)
Dimensions	Ø 50 x 540 mm
Protection	IP65

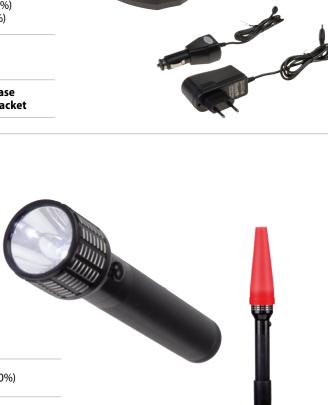




### NX231 RECHARGEABLE AND MAGNETIC LED FLOOD LIGHT.

4 operating modes: steady light (100%), steady light (50%), SOS flashing and fast flashing. Charged by vehicle charging cable or 230/12V battery charger. Aluminium body. Steel bracket. Polycarbonate lens.

Power	15 W	Protection	IP65
Powered by	Rechargeable lithium battery 7.4 V - 4.4 Ah	Brightness	<b>950 Lm (</b> 100%) <b>475 Lm</b> (50%)
Operating time	<b>4,5 hours (</b> 100%) <b>9 hours</b> (50%)	Charging time	4/5 hours
Dimensions	110 x 200 x 95 mm	Fixing	Magnetic base Foldable bracket



# NX270

#### LED RECHARGEABLE TORCH WITH SIGNALLING KIT.

3 operating modes: steady light (100%), steady light (30%), flashing light. Resistant to dust, water and vibration. Charged by vehicle charging cable or 230/12V battery charger. Red-yellow cones and tripod provided.

Light beam	300 m	Brightness	<b>300 lm</b> (100%)
Powered by	Rechargeable Ni-Cd battery 4.8 V - 3,5 Ah	Protection	IP65
Operating time	<b>7 hours</b> (100%)	Charging time	8 hours
Dimensions	Ø 56 x 267 mm	Fixing	Wall adapter Tripod





### EMERGENCY KITS





### **IMPULSE 102**

#### EMERGENCY LED KIT FOR DANGEROUS ZONES, ACCIDENT ETC.

#### 9 different selectable flashing patterns.

Charging from the mains or cigarette lighter. Magnetic, shock resistant and waterproof.



Not synchronized with each other

#### Watch the video:

Optic	360°
Colour	••
Power supply	Rechargeable lithium battery 700 mA 3,7 V
Charging time	12/14 ore
Protection	IP65
Fixing	Magnetic base









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### LIGHTSHIELD

#### LED SYSTEM FOR EMERGENCY SIGNALLING IN DANGEROUS AREAS.

Set of 6 LightShields, rechargeable inside the case or individually.

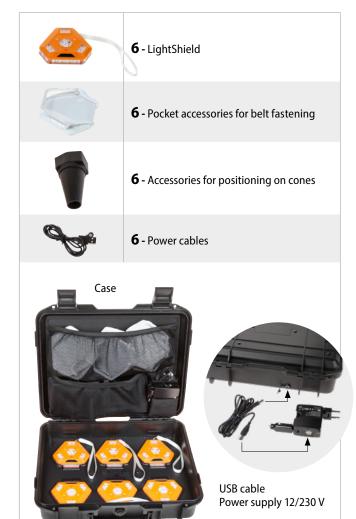
Charging from the mains (230V) or cigarette-lighter socket (12V).

12 different selectable flashing modes. (12 for single modules, 5 for synchronized operation).

Single magnetic devices, supplied with accessories for positioning on cones or with pockets for personal protection.

Available colours: O

#### Supplied with:



Watch the video:



Synchronizable with each other





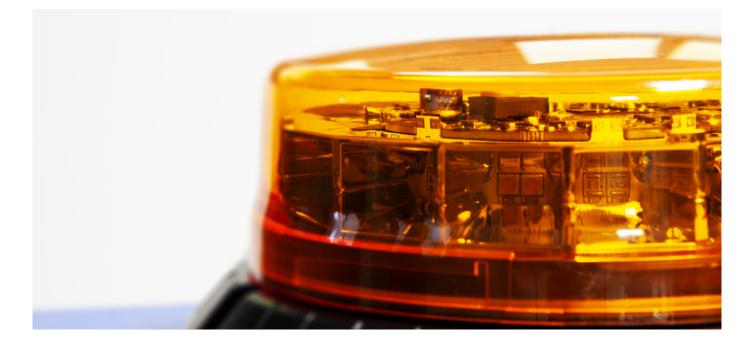
for belt fastening -





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# ROTATORS AND STROBE



### GOLD SERIES

**ECONOMIC LED BEACON** for or industrial and safety vehicles.



European certification	ECE R10 - ECE R65
Colour	•
Input voltage	12/24 VDC
Power cons.	0.80 A @12 V
Mounting	Fixed / magnetic
Dimensions	Ø 147 x 121 mm Fxed Ø 148 x 141 mm Magnetic







#### ECONOMIC LED BEACON

for industrial and safety vehicles.

Available blue version for law enforcement vehicles.

Availabe vesion ICAO certified.

European certification	ECE R65, R10	
Colour		
Input voltage	12/24 VDC	
Power cons.	0.9 A @12 V	
Mounting	Fixed / magnetic / FLX	
Dimensions	Ø 153 x 143 mm Fixed Ø 167 x 151,6 mm Magnetic Ø 134 x 208 mm FLX	







### 5100 SERIES

#### LOW PROFILE LED BEACON

for industrial and safety vehicles.

European certification	ECE R65, R10
Colour	•
Input voltage	12/24 VDC
Power cons.	2 A @12 V
Mounting	Fixed / magnetic / FLX
Dimensions	Ø 149 x 72 mm Fixed Ø 155 x 70 mm Magnetic Ø 148 x 172 mm FLX







### LED BARS



### BLAZE LED

#### ECONOMIC LED LIGHT MINI BAR

with high profile lens and high brightness LED.

Two modules with 360° light emission.

Colour	•
Input voltage	12 VDC 24 VDC
Power cons. @12V	3 A
Mounting	Fixed / magnetic
Dimensions	400 x 145 x 210 mm







### 5565 SERIES

#### LOW PROFILE LED LIGHT MINI BAR.

Eight reflectors, each composed of three LEDs, provide high-intensity light.

17 selectable flashing modes.

European certification	ECE R65
Colour	•
Input voltage	12/24 VDC
Power cons. @12 V	5.1 A
Mounting	Fixed / magnetic
Dimensions	381 x 79 x 229 mm





### ED3300 SERIES

#### DIRECTIONAL LED BAR.

Directional arrow with control head right / left / flasher. With external controller.





Colour	•
Input voltage	12 / 24 VDC
Power cons.	20 W
Mounting	Fixed
Dimensions	1232 x 51 x 76 mm



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### BASIC BAR 304

#### DIRECTIONAL LED BAR.

Control head right / left / flasher. Length 222 cm, 6 Basic 304 LED lights approved to EN 12352 L9H. 12 or 24 V.

With NASLCH2 controller.





### BASIC BAR 210

#### DIRECTIONAL LED BAR.

Control head right / left / flasher. Length 130 cm. 5 Basic 210 LED lights approved to EN12352 L8H. 12 or 24 V.

With EPM controller.









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### LED BARS



# 12 LED SERIES

### SLIM PROFILE ULTRA-BRIGHT LED

**LIGHT BAR,** with minimum aerodynamic impact

Low current draw. Long life LEDs maintenance-free. 360° light output. Built-in 33 selectable flash patterns. 7 standard configurations ECE R65. Optional control unit.









European certification	ECE R65, R10
Colour	•
Input voltage	12/24 VDC
Power cons.	8,8 A @12 V
Mounting	Fixed
Available lenghts	1220 mm - 1370 mm - 1520 mm - 1830 mm



# LED LIGHT DEVICES





### NCC66

#### 6 LED LIGHT MODULE.

Do not require any external controller.

Several flashing patterns.

European approval	ECE R65, R10
Colour	•
Tensione ingresso	12 / 24 VDC
Max power cons.	1.2 A @ 12 V
Mounting	Fixed
Dimensions	120,5 x 31,4 x 14,3 mm





### NCC3703A

#### 3 LED LIGHT MODULE.

Do not require any external controller.

Several flashing patterns.



European approval	ECE R65, R10
Colour	•
Tensione ingresso	12 / 24 VDC
Power cons.	0.4 A @ 12 V
Mounting	Fixed
Dimensions	93 x 35 x 15 mm

### NCC3705A

#### 6 LED LIGHT MODULE.

Do not require any external controller.

Several flashing patterns.



European approval	ECE R65, R10
Colour	•
Tensione ingresso	12 / 24 VDC
Power cons.	0.9 A @ 12 V
Mounting	Fixed
Dimensions	158 x 35 x 15 mm



### SEARCH LIGHTS





### **GOLIGHT 2020**

Wired remote control.

Cable with connector L=500 mm.

UV ray and saltwater resistant.



Input voltage	12 VDC
Luminous intensity	400.000 cd
Power cons.	65 W
Average Amp. draw	5.5 A
Mounting	Fixed / suction cup
Rotation	<b>370° x 135°</b> vertical
Dimensions	165 x 178 x 178 mm





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### **GOLIGHT STRYKER 3051**

On request white colour.

Wireless remote control.

Weatherproof for land and sea applications.

Input voltage	12 VDC
Luminous intensity	500.000 cd
Power cons.	65 W
Average Amp. draw	5.5 A
Mounting	fixed
Rotation	<b>370° x 135°</b> vertical
Dimensions	170 x 182 x 206 mm





### DTS LED POINT

#### **LED WORK LIGHTS**

for fixed mounting on vehicles.

White light (6500K), luminous beam 60°.

High efficency optics (93%).

LED powered singularly: one single failure doesn't compromise the functionality of the light body.

Protection: IP67.





DTS-LED POINT 6

DTS-LED POINT 12



Models Luminous flux Power cons. Input voltage Dimensions DTS-LED POINT 6 1260 lm 18 W 96 x 79 x 64 mm 36 W 9÷32 VDC **DTS-LED POINT 12** 2520 lm 164 x 79 x 64 mm DTS-LED POINT 18 3780 lm 54 W 232 x 79 x 64 mm

**DTS-LED POINT 18** 















D-Power has created a logo that identifies products characterized by the possibility of being synchronized with each other in flashing mode. Even different products such as Ecosolar, SolarTop, SolarGrond etc. can be synchronized with each other. All this helps to increase the perception of the road user.



Detas SpA created Clean Power, an eco-label that distinguishes products that, while guaranteeing high performance standards, are characterised by the materials used, construction and power supply, designed to increase their lifecycle in a sustainable perspective.

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