



# Garda - LED

## GENERAL CHARACTERISTICS

**Housing and arms:** pressed in die-cast aluminium and designed with a very small surface exposed to wind.

**Optics:** made of PMMA with high temperature resistance and UV rays.

**Pole connection:** pressed in die-cast aluminium. Suited for poles with a diameter 60-76mm.

**Diffuser:** extra-clear tempered glass, 5 mm thick, resistant to thermal shocks and impacts (UNI-EN 12150-1: 2001).

**Coating:** the standard liquid immersion coating consists of a first metal surface pre-treatment stage, a successive epoxy cataphoresis corrosion and salt resistant coating, and a final layer of bi-component acrylic liquid UV-stabilised coating.

**Upon request:** coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

**Equipment:** nylon wiring plate 30% fibre glass complete with connector for mains connection and for LED module. Automatic temperature control inside the device with automatic resetting. With dedicated electronic device to protect the LED module. Equipped with an air-circulation valve.

## OTHER CHARACTERISTICS



Electronic safety device to protect the LED module and the related ballast compliant with EN

61547.

It works in two modes:

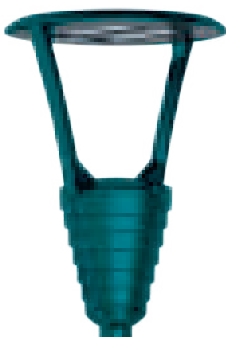
- differential mode: surge between power cables and between the phase and neutral.

- common mode: surge between power, L/N and ground cables or between the fixture's body if it is of class II and installed on a metal pole.



Product with a very low flicker; uniform light for greater eye protection.

Available in colour **RAL 6004**



## THE RANGE OF GARDA STREET LAMPS IS AVAILABLE IN THE FOLLOWING COLOUR TEMPERATURES:

**2200K**

**2200K (subcode -73):** lamps with warm amber light at a colour temperature of 2200K eliminate the risks of an excessive exposure to harmful blue LED light and allows a "softer" impact on inhabited zones, especially in historic centres.

**3000K  
4000K**

**3000K - 4000K as standard:** lamps with 3000K-4000K white light, instead, is the best choice for lighting up urban areas, streets, residential centres and generally all areas where this type of light guarantees greater safety and visual comfort.




## BASIC PROG (BASIC CLD) AVAILABLE FUNCTIONS

<b>Luminous flux</b> setup	This can be done by programming the drive current values requested when ordering/purchasing the fixture
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## LIGHTING POINT MANAGEMENT OPTIONS ON REQUEST

possibility to choose different lighting point management systems according to the system's needs:

<b>1-10V dimming</b> ordered with <b>sub-code -12</b>	Adjustment range from 10%-100% with 1-10V
 <b>Virtual Midnight</b> order with <b>subcode -30</b>	Stand-alone system with automatic luminous flux reduction in <b>4 steps</b> . To increase energy savings at night when there are fewer people and vehicles around, a lighting fixture can be programmed according to a specific profile (customizable on request). The fixture reduces its luminous flux through a self-learning process which, depending on the previous switching on and off times, will determine a hypothetical "virtual midnight". This is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The "virtual midnight" is the reference point for dimming lights according to the desired profile. The device is integrated in the LED driver and therefore does not require any modification to the system. <i>In order for the system to function correctly, the system must be adjusted by a device that turns the system on and off on a regular basis every day.</i>
<b>Factory settings</b>	
<b>Time</b>	<b>Flux</b>
on ÷ 22:00	100%
22:00 ÷ 23:30	75%
23:30 ÷ 02:30	50%
02:30 ÷ 04:00	75%
04:00 ÷ off	100%
<b>PLC remote control</b> ordered with <b>sub-code -0078</b>	Point-to-point and system management and diagnosis system
For more information see page XVI-XX	



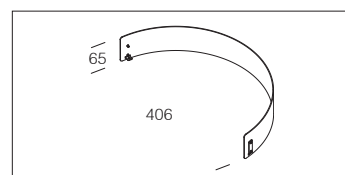
**Exemple with Zhaga Socket (subcode -0054)**

**LUMINAIRE DESIGNED FOR INSTALLATION ON NEMA OR ZHAGA SOCKET:** to monitor and manage public lighting centrally, lighting fixtures will always be more equipped with wireless controls that will allow their integration with the IoT. Today the market offers two solutions: **NEMA and ZHAGA**. Both solutions offer an electrical and mechanical connection between the control antenna and the lighting fixture.

<b>Nema Socket</b> order with <b>subcode -40</b> (sealing cap to be ordered separately)	Mounted directly on the fixture's body, ideal for remote lighting management applications.
<b>Zhaga Socket</b> order with <b>subcode -0054</b> (complete with sealing cap)	



# Garda - LED



**acc. 109 anti-glare shield**  
 anthracite 991312-00  
 To prevent glare effects. To be fitted when Garda is installed near a window.

**RG0**  
**E<sub>th</sub>**

+50  
 C  
 -40

U.V.

LOW  
 FLICKER

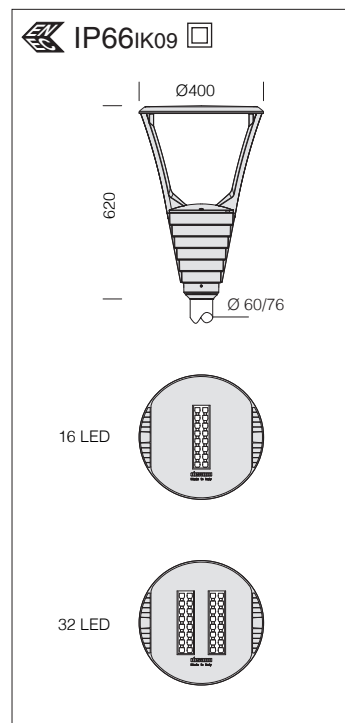
3000K

4000K

Upon request (sub-code -60)

LED	4000K - CRI 80
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Technical specifications: L=769cm<sup>2</sup>, 60/76, ZONA SURGE, 35W=6/10kV, 66W=6/10kV, 3351. Includes a beam spread diagram showing light distribution.



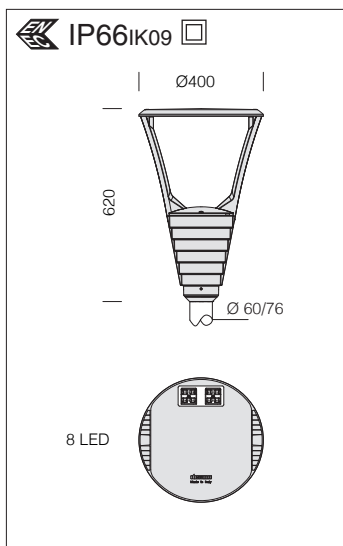
3351 Garda 2 - asymmetric					
		CLD BASIC		LUMEN OUTPUT (tq= 25 °C)	
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	5.70	330520-00	35	4000K - 3773lm - CRI 70
			330520-39		3000K - 3508lm - CRI 70
LED	anthracite	5.90	330521-00	66	4000K - 7275lm - CRI 70
			330521-39		3000K - 6765lm - CRI 70

Upon request: possibility to choose different lighting point management systems (see table on p. 319).

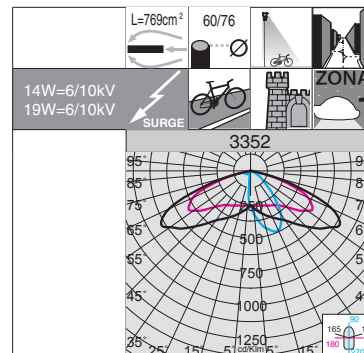
Example	Power supply	n.LED	W tot	K	ølm
upon request	530mA	16	26	4000K	2830lm
		32	50		5765lm
upon request	530mA	16	26	3000K	2632lm
		32	50		5361lm

**LED:** Power factor ≥0.9.  
 Luminous flux maintenance 80%:  
 >100.000h (L80B10).

# Garda - LED



80.000h



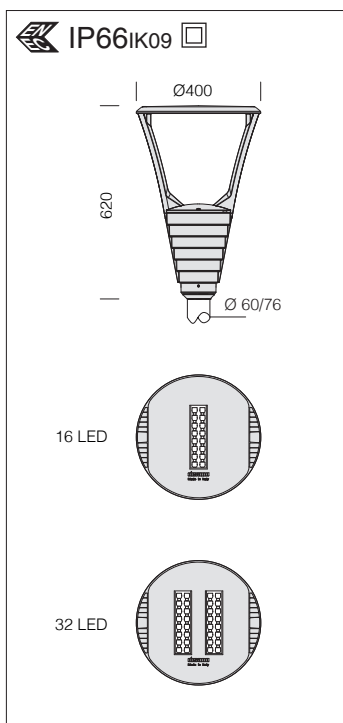
2200K - AMBER (sub-code -73)	
W tot	LUMEN OUTPUT (tq= 25 °C)
14	2200K - 1590lm
19	2200K - 2058lm

- RG0 Ethr
- +50°C -40°C
- U.V.
- LOW FLICKER
- 3000K
- 4000K

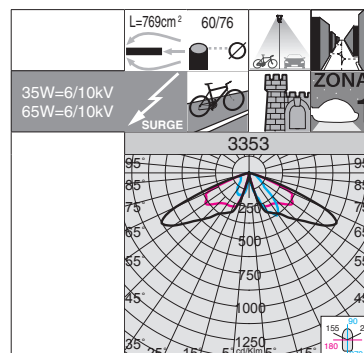
**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
80.000h (L80B20).

3352 Garda 3 - cycleways						
wattage	colour	weight	CLD BASIC		W tot	LUMEN OUTPUT (tq= 25 °C)
			code	K - ølm - CRI		
LED	anthracite	5.60	330530-00	14	4000K - 1790lm - CRI 70	
			330530-39			3000K - 1664lm - CRI 70
LED	anthracite	5.60	330531-00	19	4000K - 2318lm - CRI 70	
			330531-39			3000K - 2155lm - CRI 70

**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).



>100.000h



Upon request (sub-code -60)	
LED	LUMEN OUTPUT (tq= 25 °C)
LED	4000K - CRI 80

- RG0 Ethr
- +50°C -40°C
- U.V.
- LOW FLICKER
- 3000K
- 4000K

**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).

3353 Garda 4 - cycleways + residential amenities						
wattage	colour	weight	CLD BASIC		W tot	LUMEN OUTPUT (tq= 25 °C)
			code	K - ølm - CRI		
LED	anthracite	5.70	330540-00	35	4000K - 3525lm - CRI 70	
			330540-39			3000K - 3278lm - CRI 70
LED	anthracite	5.90	330541-00	65	4000K - 6887lm - CRI 70	
			330541-39			3000K - 6404lm - CRI 70

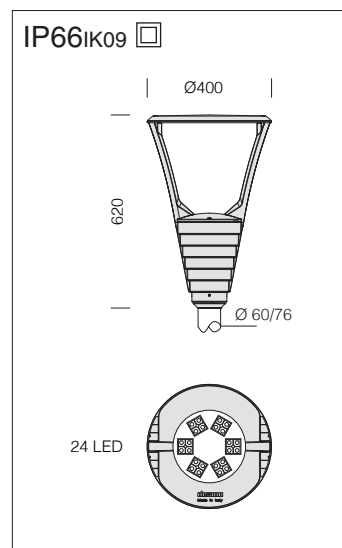
**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).

Example	Power supply	n.LED	W tot	K	ølm
upon request	530mA	16	26	4000K	2644lm
		32	50		5514lm
upon request	530mA	16	26	3000K	2458lm
		32	50		5128lm

# Garda - LED

L=769cm<sup>2</sup> 60/76  
 ZONA SURGE 44W=6/10kV  
 3355

2200K - AMBER (sub-code -73)	
W tot	LUMEN OUTPUT (tq= 25 °C)
44	2200K - 5195lm



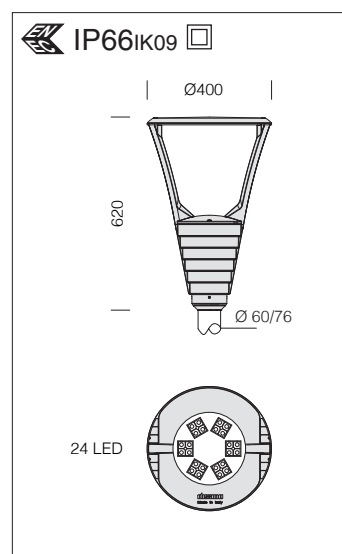
3355 Garda 6 - wide beam					
		CLD BASIC		LUMEN OUTPUT (tq= 25 °C)	
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	5.80	330551-00	44	4000K - 5851lm - CRI 70
			330551-39		3000K - 5441lm - CRI 70

**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).

**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
80.000h (L80B20).

L=769cm<sup>2</sup> 60/76  
 ZONA SURGE 44W=6/10kV  
 3355

2200K - AMBER (sub-code -73)	
W tot	LUMEN OUTPUT (tq= 25 °C)
44	2200K - 5121lm

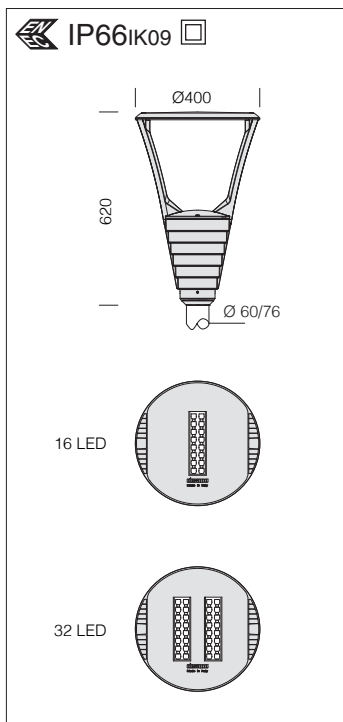


3355 Garda 5 - wide beam					
		CLD BASIC		LUMEN OUTPUT (tq= 25 °C)	
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	5.80	330550-00	44	4000K - 5767lm - CRI 70
			330550-39		3000K - 5363lm - CRI 70

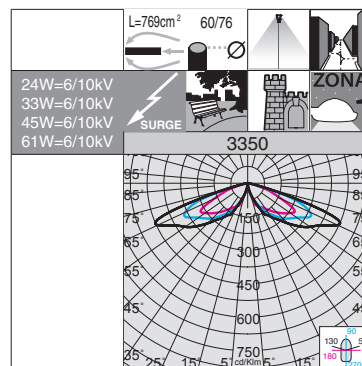
**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).

**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
80.000h (L80B20).

# Garda - LED



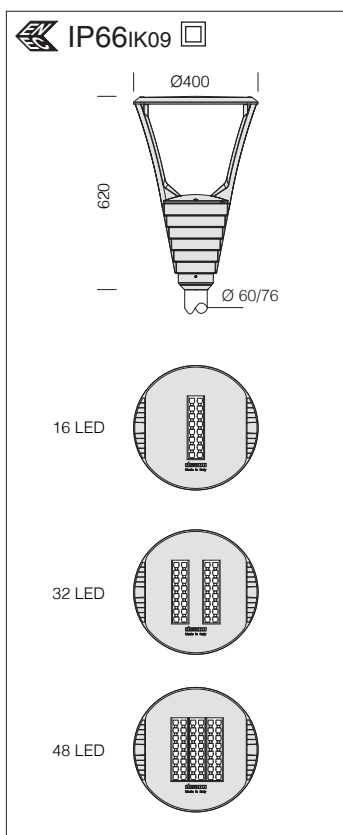
**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).



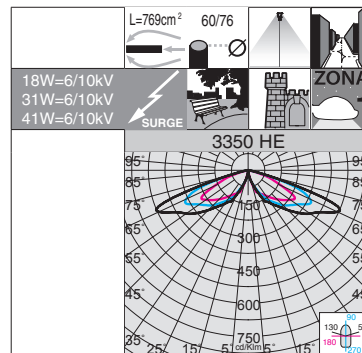
Upon request (sub-code -60)	
LED	4000K - CRI 80

3350 Garda 1 - wide beam						
wattage	colour	weight	CLD BASIC		LUMEN OUTPUT (tq= 25 °C)	
			code	W tot	K - ølm - CRI	
LED	anthracite	5.70	330518-00	24	4000K - 2400lm - CRI 70	
			330518-39		3000K - 2232lm - CRI 70	
LED	anthracite	5.90	330519-00	45	4000K - 4800lm - CRI 70	
			330519-39		3000K - 4464lm - CRI 70	
LED	anthracite	5.70	330510-00	33	4000K - 3200lm - CRI 70	
			330510-39		3000K - 2976lm - CRI 70	
LED	anthracite	5.90	330511-00	61	4000K - 6400lm - CRI 70	
			330511-39		3000K - 5952lm - CRI 70	

**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).



**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).



Upon request (sub-code -60)	
LED	4000K - CRI 80

3350 Garda 1 HE - wide beam						
wattage	colour	weight	CLD BASIC		LUMEN OUTPUT (tq= 25 °C)	
			code	W tot	K - ølm - CRI	
LED	anthracite	5.70	330512-00	18	4000K - 1823lm - CRI 70	
			330512-39		3000K - 1695lm - CRI 70	
LED	anthracite	5.90	330513-00	31	4000K - 3463lm - CRI 70	
			330513-39		3000K - 3221lm - CRI 70	
LED	anthracite	5.90	330517-00	41	4000K - 5193lm - CRI 70	
			330517-39		3000K - 4829lm - CRI 70	

**Upon request:** possibility to choose different lighting point management systems (see table on p. 319).



AMENITIES FIXTURES