

SMART



## Less power great performances

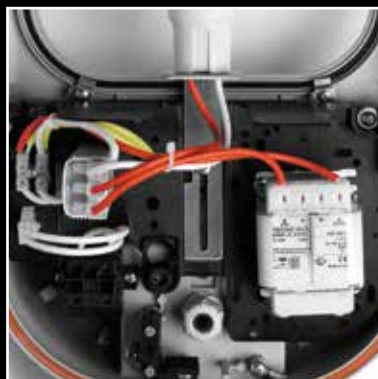
**SMART** is the answer to the increasing demand for both low energy consumption and high efficiency.

Based on many years' experience in road lighting, it offers extraordinary performances.

An indisputably pure design and impecca-

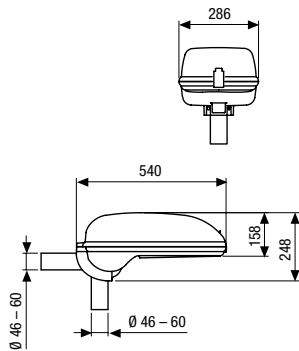
ble construction: the perfect combination to ensure the best on the market.

In the **Bipower** version, the streetlight **SMART** represents a further possibility to decrease the carbon footprint of public authorities in the management of energy consumptions.

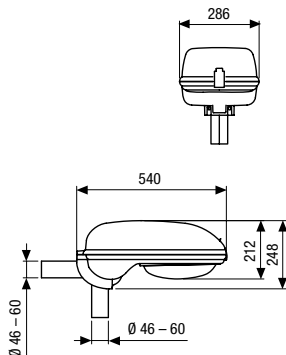


# Technical features of Smart

## Dimensions



Smart VP



Smart VB

## Description

### CHARACTERISTICS

- The housing (body and top cover) is manufactured in die-cast aluminium alloy.
- Coated with polyester powders in Silver colour. Twin colours available on request.
- Reflector is made of high purity (99,8%) one piece pressed electro-polished anodized aluminium.
- Post top entry installation, Ø 46 ÷ 60mm.
- Post top entry installation with accessory, Ø 72 ÷ 76 mm.
- Post top tilt angles can be in 3 positions: 0° +5° +10°.
- Side entry installation, Ø 46 ÷ 60mm., the luminaire gets inclination of the arm.
- In case of side entry installation with tilt of 10° and 15°, an inclination luminaire accessory limiting the tilt at 0°, is included.
- Gaskets in anti-aging and weather resistant silicon rubber.
- For Class II electrical, the luminaire is equipped with a safety switch that disconnects the main power supply on opening the luminaire in maintenance.
- Porcelain lamp holder with horizontal and vertical mechanical focusing device.
- Adjustable reflector in order to optimize the optical performance and light distribution
- Connection to power supply via a cable gland PG 13,5 - IP 68
- Protection degree against external impacts: IK 08.
- Pressure compensation filter in Teflon.
- Gear plates:
  - for CL I of a galvanized steel sheet.
  - for CL II injection molded with special thermoplastic material.
- Both gear plates are completed with lamp holder and/or electrical connectors for fast replacement and easy maintenance.
- The luminaire can be provided with a fuse (optional).
- The gear and lamp compartment can be easily accessed by opening the fore stainless steel hook.
- For quick and safety inspection the luminaire is supplied with anti-tipping cover device.
- Electrical components are certified with ENEC Mark for power supply of 230V 50Hz.
- European Standards: EN 60598/1
- Maximum mounting height: 15 mt.

### SMART VP

- Output ratio: cut-off.
- Optic group with thermal toughened flat glass.
- Wind exposed surface = 0,0870 m<sup>2</sup>.

### COLOUR



Silver (Twin colours on request)

### SMART VB

- Output ratio: semi cut-off.
- Optic group with thermal toughened curved glass.
- Wind exposed surface = 0,0980 m<sup>2</sup>.

### BI-POWER VERSION

For power savings, the bi-power Version can be supplied in flat glass (VP) street lights. This version is equipped with a programmable switch and an electromechanical bi-power reactor. The switch along with the reactor is responsible to reduce the power during night-time (off-peak hours) when the road traffic decreases below 50%.

The system does not require a pilot-wire to operate. The switch operates in complete autonomy. An internal Timer measures the total duration of operation on each day, establishing with precision the waiting time before it switches to reduced power.

The starting and ending times of reduced power operation can be easily changed by using the dip-switches on the programmable switch.

The system ensures considerable power savings. For example, a 150W high pressure sodium vapour street light when used with a bi-power version achieves an annual power saving of approximately 150KW. This in turn has a remarkable effect in reducing the CO<sub>2</sub> emissions in the environment (a saving of 1KW corresponds to a reduction of CO<sub>2</sub> emissions of 0.5 Kg).





The SMART reflectors have been designed to make the best use of the small size of Cosmo White lamps (45-60-90-140W) and get excellent lighting efficiencies.

The lamps are characterized by an average life greater than 24,000 hours, a constant luminous flux over the course of their lives, a particularly warm color temperature, a high color rendering index and luminous efficiency over 100 lm/W, making this luminaire the ideal tool to light up streets and, in particular, historic centers.

The power supply unit is constituted by a solid electronic ballast, equipped with over tension resistance with surge protection, till 10kV.

For 60, 90 and 140W lamps, special versions are available specifically designed for energy saving. The electronic ballasts that power the lamp are able to reduce the luminous flux up to 50% for a duration of 6 hours, during the nighttime. For the operation of the system is not necessary to connect any pilot-wire. The switch operates in complete autonomy, establishing the midnight and, consequently, the start of operation at reduced power. In this configuration, you get an energy saving of 40%. For further information about the solutions for energy savings, please see page 198 of this catalogue.

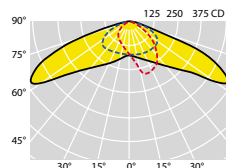
### LAMPS

	ST (SAP-T) - E27 50-70W - E40 100-150W
	MT (JM-T) - E27 70W - E40 100-150W
	MT (JM) - G12 70-150W
	COSMO-WHITE PGZ12 45-60-90-140W

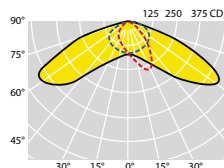
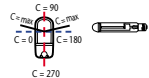
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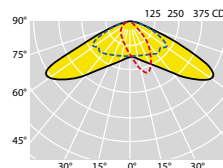
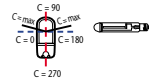
Smart VP



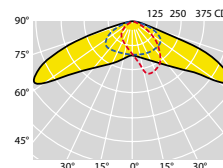
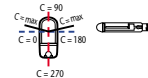
ST (SAP-T) 70W E27  
POS. B-3-A C max=25°



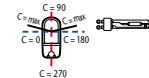
ST (SAP-T) 100W E40  
POS. B-4-A C max=25°



ST (SAP-T) 150W E40  
POS. X-4-A C max=20°



Cosmo White 140W PGZ12  
POS. C-3-A C max=25°



## Product codes

### SMART VP - CL I

CODE	DESCRIPTION	LAMP TYPE	WEIGHT (KG)	PACKING (PCS)	PALLET (PCS)	VOLUME
44000	ST (SAP-T) 50W	ST (SAP-T) 50W	7.44	1	36	0.047
44001*	ST (SAP-T) 70W	ST (SAP-T) 70W	7.74	1	36	0.047
44002	MT (JM-T) -ST (SAP-T) 100W	MT (JM-T) -ST (SAP-T) 100W	7.89	1	36	0.047
44003	MT (JM-T) -ST (SAP-T) 150W	MT (JM-T) -ST (SAP-T) 150W	8.71	1	36	0.047
44005	MT (JM-T) 70W	MT (JM-T) 70W	7.74	1	36	0.047
44015	MT (JM-T) 70W - G12	MT (JM-T) 70W - G12	7.74	1	36	0.047
44016	MT (JM-T) 150W - G12	MT (JM-T) 150W - G12	8.61	1	36	0.047
44030	Cosmo-white PGZ12 45W	Cosmo-white PGZ12 45W	6.97	1	36	0.047
44031	Cosmo-white PGZ12 60W	Cosmo-white PGZ12 60W	6.97	1	36	0.047
44032	Cosmo-white PGZ12 90W	Cosmo-white PGZ12 90W	6.97	1	36	0.047
44033	Cosmo-white PGZ12 140W	Cosmo-white PGZ12 140W	6.97	1	36	0.047
44081	Cosmo-white PGZ12 60W - DIMM. 6H.	Cosmo-white PGZ12 60W - DIMM. 6H.	6.97	1	36	0.047
44082	Cosmo-white PGZ12 90W - DIMM. 6H.	Cosmo-white PGZ12 90W - DIMM. 6H.	6.97	1	36	0.047
44083	Cosmo-white PGZ12 140W - DIMM. 6H.	Cosmo-white PGZ12 140W - DIMM. 6H.	6.97	1	36	0.047
€ 44021	Bipower ST (SAP-T) 70/50W	ST (SAP-T) 70/50W	7.74	1	36	0.047
€ 44022	Bipower ST (SAP-T) 100/70W	ST (SAP-T) 100/70W	7.89	1	36	0.047
€ 44023	Bipower ST (SAP-T) 150/100W	ST (SAP-T) 150/100W	8.71	1	36	0.047

\* With ignitor

€ Luminaire with CE marking only

### SMART VP - CL II

CODE	DESCRIPTION	LAMP TYPE	WEIGHT (KG)	PACKING (PCS)	PALLET (PCS)	VOLUME
44100	ST (SAP-T) 50W	ST (SAP-T) 50W	7.44	1	36	0.047
44101*	ST (SAP-T) 70W	ST (SAP-T) 70W	7.74	1	36	0.047
44102	MT (JM-T) -ST (SAP-T) 100W	MT (JM-T) -ST (SAP-T) 100W	7.89	1	36	0.047
44103	MT (JM-T) -ST (SAP-T) 150W	MT (JM-T) -ST (SAP-T) 150W	8.71	1	36	0.047
44105	MT (JM-T) 70W	MT (JM-T) 70W	7.74	1	36	0.047
44115	MT (JM-T) 70W - G12	MT (JM-T) 70W - G12	7.74	1	36	0.047
44116	MT (JM-T) 150W - G12	MT (JM-T) 150W - G12	8.61	1	36	0.047
44130	Cosmo-white PGZ12 45W	Cosmo-white PGZ12 45W	6.97	1	36	0.047
44131	Cosmo-white PGZ12 60W	Cosmo-white PGZ12 60W	6.97	1	36	0.047
44132	Cosmo-white PGZ12 90W	Cosmo-white PGZ12 90W	6.97	1	36	0.047
44133	Cosmo-white PGZ12 140W	Cosmo-white PGZ12 140W	6.97	1	36	0.047
44181	Cosmo-white PGZ12 60W - DIMM. 6H.	Cosmo-white PGZ12 60W - DIMM. 6H.	6.97	1	36	0.047
44182	Cosmo-white PGZ12 90W - DIMM. 6H.	Cosmo-white PGZ12 90W - DIMM. 6H.	6.97	1	36	0.047
44183	Cosmo-white PGZ12 140W - DIMM. 6H.	Cosmo-white PGZ12 140W - DIMM. 6H.	6.97	1	36	0.047
€ 44121	Bipower ST (SAP-T) 70/50W	ST (SAP-T) 70/50W	7.74	1	36	0.047
€ 44122	Bipower ST (SAP-T) 100/70W	ST (SAP-T) 100/70W	7.89	1	36	0.047
€ 44123	Bipower ST (SAP-T) 150/100W	ST (SAP-T) 150/100W	8.71	1	36	0.047

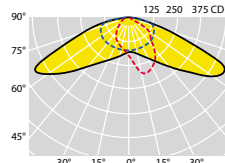
\* With ignitor

€ Luminaire with CE marking only

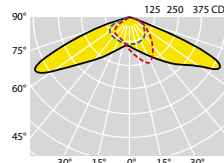
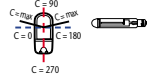
## Photometric data



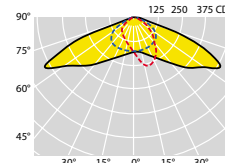
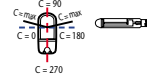
Smart VB



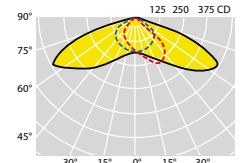
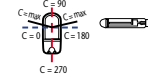
ST (SAP-T) 70W E27  
POS. B-3-A C max=25°



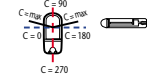
ST (SAP-T) 100W E40  
POS. A-4-A C max=25°



ST (SAP-T) 100W E40  
POS. B-4-A C max=25°



ST (SAP-T) 150W E40  
POS. A-4-A C max=30°



## Product codes

### SMART VB - CL I

CODE	DESCRIPTION	LAMP TYPE	WEIGHT (KG)	PACKING (PCS)	PALLET (PCS)	VOLUME
44200	ST (SAP-T) 50W	ST (SAP-T) 50W	7.64	1	36	0.047
44201*	ST (SAP-T) 70W	ST (SAP-T) 70W	7.94	1	36	0.047
44202	MT (JM-T) -ST (SAP-T) 100W	MT (JM-T) -ST (SAP-T) 100W	8.09	1	36	0.047
44203	MT (JM-T) -ST (SAP-T) 150W	MT (JM-T) -ST (SAP-T) 150W	8.91	1	36	0.047
44205	MT (JM-T) 70W	MT (JM-T) 70W	7.94	1	36	0.047
44215	MT (JM-T) 70W - G12	MT (JM-T) 70W - G12	7.94	1	36	0.047
44216	MT (JM-T) 150W - G12	MT (JM-T) 150W - G12	8.81	1	36	0.047
44230	Cosmo-white PGZ12 45W	Cosmo-white PGZ12 45W	7.17	1	36	0.047
44231	Cosmo-white PGZ12 60W	Cosmo-white PGZ12 60W	7.17	1	36	0.047
44232	Cosmo-white PGZ12 90W	Cosmo-white PGZ12 90W	7.17	1	36	0.047
44233	Cosmo-white PGZ12 140W	Cosmo-white PGZ12 140W	7.17	1	36	0.047

\* With ignitor

### SMART VB - CL II

CODE	DESCRIPTION	LAMP TYPE	WEIGHT (KG)	PACKING (PCS)	PALLET (PCS)	VOLUME
44300	ST (SAP-T) 50W	ST (SAP-T) 50W	7.64	1	36	0.047
44301*	ST (SAP-T) 70W	ST (SAP-T) 70W	7.94	1	36	0.047
44302	MT (JM-T) -ST (SAP-T) 100W	MT (JM-T) -ST (SAP-T) 100W	8.09	1	36	0.047
44303	MT (JM-T) -ST (SAP-T) 150W	MT (JM-T) -ST (SAP-T) 150W	8.91	1	36	0.047
44305	MT (JM-T) 70W	MT (JM-T) 70W	7.94	1	36	0.047
44315	MT (JM-T) 70W - G12	MT (JM-T) 70W - G12	7.94	1	36	0.047
44316	MT (JM-T) 150W - G12	MT (JM-T) 150W - G12	8.81	1	36	0.047
44330	Cosmo-white PGZ12 45W	Cosmo-white PGZ12 45W	7.17	1	36	0.047
44331	Cosmo-white PGZ12 60W	Cosmo-white PGZ12 60W	7.17	1	36	0.047
44332	Cosmo-white PGZ12 90W	Cosmo-white PGZ12 90W	7.17	1	36	0.047
44333	Cosmo-white PGZ12 140W	Cosmo-white PGZ12 140W	7.17	1	36	0.047

\* With ignitor



## Accessories and spare parts



**60026**  
Wall bracket electro welded hot-dip galvanized



**60030**  
Modular wall bracket galvanized



**60063**  
Corner bracket electro welded galvanized



**60031**  
Modular corner bracket galvanized

CODE	DESCRIPTION	WEIGHT (KG)	PACKING (PCS)	COLOURS	VOLUME
12035	Glass - Smart VP	0.67			
12036	Curved glass - Smart VB	0.95			
60026	Wall bracket electro welded hot-dip galvanized Ø 60	1.27	6	Hot galvanized	0.00257
60030	Modular wall bracket galvanized Ø 60	1.05	4	Hot galvanized	0.00160
60063	Corner bracket electro welded galvanized Ø 60	2.60	4	Hot galvanized	0.00835
60031	Modular corner bracket galvanized Ø 60	1.90	3	Hot galvanized	0.00210
60402	Top entry pole accessory Ø mm. 76	0.09	1		
16099	Osram lamp ST 50W Super				
04413	Osram lamp ST 70W E27 SUPER				
02676	Osram lamp ST 100W E40 SUPER				
12337	Osram lamp ST 150W E40 SUPER				
16100	Osram lamp MT 70W 3000K				
16101	Osram lamp MT 100W 3000K				
07828	Philips lamp MT 150W 2800K				
08821	Lamp MT 70W G12 3000K				
07649	Ceramic discharge tube lamp G12 JM 150W 3000K				
12401	Venture lamp ST 70W E27 SUPER				
12402	Venture lamp ST 100W E40 SUPER				
12403	Venture lamp ST 150W E40 SUPER				
13406	Cosmo-White lamp PGZ12 45W 2815K				
13407	Cosmo-White lamp PGZ12 60W 2760K				
13408	Cosmo-White lamp PGZ12 90W 2870K				
13409	Cosmo-White lamp PGZ12 140W 2860K				