





1767 Monza photovoltaic - Power LED				
		CLD CTL		
wattage	colour	weight	code	W tot.
LED white	s. silver	50,00	423067-00	24W

L 3300 cmm
F-7700 cmm

new

Upon request:

Lighting system with solar panel that is totally independent from any external power supply. Designed for pole mounting with hold ø 89. Lighting for public and private streets with limited vehicle traffic, pedestrian routes, emergency lanes, squares, public parks and private gardens, parking areas, cycle lanes, internal streets of hospital complexes, schools, and industrial sites, harbours, beaches, lakesides, railway and motorway passageways, lighting for zones where without a nearby electric grid or where connection is too expensive or technically impossible.

Description:

The LED street light powered with a photovoltaic panel has a 24 LED module and is equipped with an innovative control unit with a microprocessor that manages each phase of the system to obtain and adequate LED lighting even under the most adverse weather conditions thanks to its MPPT (Maximum Power Point Tracker) system. The PV-powered LED lamps are compliant with lighting class 82 (EN 11248-EN13201).

Advantages and strengths:

Electricity from renewable sources (Zero CO2 emissions) generated directly from the in-built Photovoltaic Panel. - No electricity costs for using the LED lamp. - LED light has longer life, higher quality and is easier to adjust, no UV emissions and IR class. - No digging work or overhead lines are necessary to be connected to the electric grid. - Reduction of light pollution pursuant to the latest regional regulations. - Improved safety along public and private streets, in dark areas and along streets that cannot be technically accessed by electricity providers.

Description of operation cycle:

the system is equipped with a central control unit equipped with a latest generation micro-processor and MPPT function that can control the entire work cycle. During the day, the system transfers energy from the panel to the battery. At dusk, based on the settings, the central unit will start the dimmer mode, reducing by nearly 50% the initial nominal luminous flux. The dimmer mode is kept at evenings until the morning after. The system is adjusted to obtain satisfying lighting levels even in case of poor sunlight conditions (for example, during the winters, and on snowy and rainy days), the PV panel is exposed to SOUTH with a 60 degrees slope. During the night-time mode, the system activates the "motion sensor" that detects the presence of people and vehicles approaching the pole and turns on the LED light at its maximum luminosity, then resetting it to the initial levels.

Box container and support	Standard version: bearing structure in stainless steel. The box enables to slope the PV panel of nearly 60 degrees. Weight of box + battery and PV panel ca. 50Kg (tot. weight + connectors and fixture ca. 60Kg). RAL7035 coating available upon request.
Photovoltaic Panel	High performance, monocrystalline, 36 cell solar module, with 80-90Wp, TUV (IEC 61215:2005), dim. 1200x540 mm
Board with 24 LED	From min. 100Lum/watt with high-efficiency secondary optics, capable of delivering an adequate luminous flux at nearly 4m / 6m from ground level. LED with colour temperature: Warm white (ca. 3000K), Natural white (ca. 4000K) and Cool white (ca. 6000K). Colour rendering index ranges from 85 to 75. LED with "Operating Life" depending on manufactures of nearly 100,000 hours, with initial performance decay of nearly 30% after 50,000 hours.
Nominal power	24 W and 12.6 W (at nearly 50% reduced power)
Fixture (Monza)	Standard in die-cast aluminium RAL7035 coating, IP66, with tempered glass, 5mm thick.
Central unit with a microprocessor	Capable of managing the different phases: MPPT of the solar panel, LED piloting, dimming, battery life, crepuscular start and motion sensor, timer-calendar, supplied and protected in resin.
Motion Sensor	Sensor capable of detecting passage and presence under the lamp within a range of nearly 10-15m, useful to optimize energy consumptions, lamp life, lighting pollution.
Battery	High-performance, lead-acid, with adequate capacity, maintenance free, long life expectancy
Wiring Kit	It uses IP66-67 connectors and connection points (vs FV panel and LED) are resin-coated.
Pole connector	Made of a galvanized and flanged tube. Coating upon request.
4m-5m pole	Available upon request, see "Instructions for use and installation" for further info. If present, make sure it is suitable for installation in wind areas from 1 to 7, excluding area 8 (Trieste) and 9 (small islands) pursuant to EN 40-3-1 and ENV 1991 2-4 standards regarding the classification of wind areas in Italy. Our poles have a diameter of nearly 89 mm at top pole.