

# Street-Light 20 / 30 / 40

Photovoltaic LED street lamps

An Italian Concept

## GENERAL FEATURES

The photovoltaic systems for illumination "Street-light 20/30/40" are technologically advanced and totally automatic.

**This product is an ideal solution for the illumination of squares, roads and intersections, where the electric grid is not present in the immediate vicinity.**

This fact allows savings on the costs related to cable ducting, restoration, asphaltting and crossing over the existent services.

**The electrical energy produced during the day is stored in two batteries and can be used at night** to power the lamp with high light intensity.

Thanks to a smart function of the charge controller "**PowerKey Light Control**", the starting duration and the light intensity

of the system are managed automatically, depending on the night duration, the energy stored in the battery and its charge level. Such controlled management allows the extension of the average lifespan of the accumulators. Also, it is possible to set up other function modes.

**The system is autonomous and ecological. It does not have operating costs or need maintenance.** Being independent from the electrical grid, and thus not affected by black-outs, it is also suitable for safety measures.

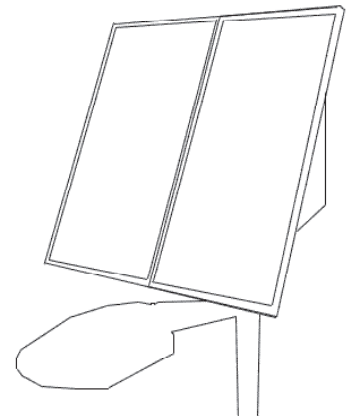
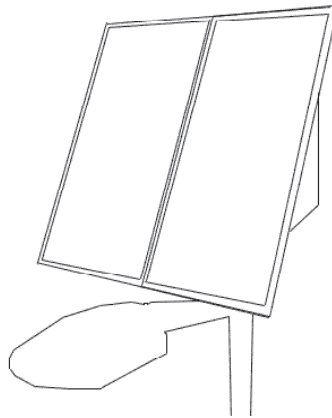
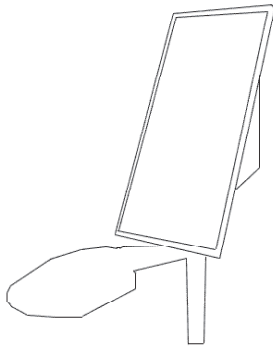
The **standard configuration** of the "Street-light 20/30/40" is "**pole-top batteries**". This means that batteries are included in a hot dip galvanized steel and varnished box, which was installed at the top of the pole.

**Street-Light 20 W - 12 V**  
**12 V System**  
**20 W Lamp**  
**100 W Photovoltaic Module**



## OPERATIONS

The lamp lights up after sunset, using the day/night recognition function. This function is given by the low tension of the photovoltaic modules: light duration and intensity are determined by the battery charge level and by the function called "memory". In fact, by storing the number of operation hours of the previous night, the system is able to understand what season it is. All this, together with the distribution of residual energy in several nights, increases the lifespan of the batteries. The expected lifespan of the lamp is at least 50.000 hours.

**STREET-LIGHT 20 W - 12 V****STREET-LIGHT 30 W - 24 V****STREET-LIGHT 40 W - 24 V**

Lamp Power	20 W
Maximum System Voltage	12 V
Light Intensity	3200 lm
Led	8
Weight	75 kg
Battery	1 x 12 V 100 Ah
Photovoltaic Module	100 Wp

Lamp Power	30 W
Maximum System Voltage	24 V
Light Intensity	4200 lm
Led	8
Weight	86 kg
Battery	2 x 12 V 100 Ah
Photovoltaic Module	2 x 100 Wp

Lamp Power	40 W
Maximum System Voltage	24 V
Light Intensity	4200 lm
Led	16
Weight	86 kg
Battery	2 x 12 V 100 Ah
Photovoltaic Module	2 x 100 Wp

Street-Lights are available with varnished or zinc-coated box  
Other special functions (for example: dimmable light).

**FUTURASUN STREET-LIGHT 20 / 30 / 40**

<b>COMPONENTS</b>	<b>CHARACTERISTICS</b>
PHOTOVOLTAIC MODULES	1 o 2 FuturaSun photovoltaic of 100 Wp.. FU 100 M is a monocrystalline photovoltaic module with 36 cells. Product guarantee: 12 years.
CHARGE CONTROLLER Made in Italy	One 15 A charge controller "FuturaSun PowerKey Light Control", with a solid-state microprocessor. Specifically designed to control the operation of a solar street lamp, this charge controller has the following main functions: <ul style="list-style-type: none"> <li>• Regulation of the battery charge level, in order to guarantee the maximum output of the energy produced by the photovoltaic modules, especially in winter time.</li> <li>• Cut-off discharge control of the batteries at the lamp exit, if the battery is out of power.</li> <li>• Day/night recognition sensor for the automatic starting of the lamp some minutes after sunset (photovoltaic modules are used as sensors to distinguish the dark from the light).</li> </ul>
BATTERIES FOR STORAGE	Two batteries for storage AGM - VRLA are included, with an integrated safety valve, with 12 V – 102 Ah C10 each. These batteries are made using AGM technology. They have high energy output and do not need any maintenance. They are suitable for cyclical discharge.
STREET LIGHT FIXTURE Made in Italy	This fixture for street furniture is elegant and modern. The unit and its entire cover are finned. The fixing block is made using aluminum die casting. The fixing block on the arm is provided in the kit (diameter: 60 mm).
STRUCTURE	Zinc-coated steel .
COLOR TEMPERATURE	5000°K (available also: 3000°K, 4000°K)
MOUNTING	Pole-top for poles of max 89 mm
LED	160 lm/watt
POLE	Not provided
According to the Italian Laws and Directives	EN 60598-1, EN 62471, EN 10819, UNI11248, EN13201 2011/65/CE, 2006/95/CE, 2004/108/CE 2004/108/CE