



GRID-CONNECTED SOLAR STREETLIGHT

BAMBU MODEL



The BAMBU grid-connected solar streetlight combines an elegant, esthetic architectural design with energy-efficient solar light generators. As such it is an excellent complementary element suitable for any urban landscape design.

BAMBU functions both as a streetlight and a photovoltaic generation plant. This grid-connected streetlight is made of a 5-meter high, galvanized steel tubular profile.

The graceful curve in the superior part of the structure is reminiscent of that of the bamboo plant while the gentle inclination of the standard serves to orient the solar panels to maximize electricity generation.

BAMBU's unique design fully integrates the photovoltaic panel into the morphology of the street-light, making it ideal for squares, parks and gardens.



The photovoltaic solar module uses a 0,9 sq. m. receptor panel fixed to an inclined structure at the apex of the streetlight. It generates 135 Wp of power.

This streetlight is designed for areas able to connect to a local electrical grid. All of the energy generated in the photovoltaic module is input into the electrical grid. In turn, the energy consumed by the luminary is drawn back from the grid.

The BAMBU streetlight has a positive net energy balance, meaning that the energy generated by the photovoltaic modules (182 kWh) is greater than the energy consumed by the luminary 🌱

Type of system	Hybrid photovoltaic power plant / conventional lighting system
PV installation	Minimum power 135 Wp
PV module	Silicium monocrystalline
Inverter (Optional)	Micro inverter 12V/220V
Structure	Galvanized steel painted with grey oxiron metal finish
Luminary	LEDS system lamp, dimmering 30W-55W
Dimensions	Total height: 5043 mm Lamp height: 5000 mm Approximately weight: 120 kg



PHOTOVOLTAIC FIELD

The photovoltaic field consists of a mono crystalline silicon module with a power of 135 Wp. The field converts the solar energy captured into DC (direct current) electrical energy.

CURRENT INVERTER

In order to input solar-generated energy to the electrical grid, the capture field is connected to a single phase current inverter . The inverter has a maximum power generation capacity of 120 W at a voltage of 220-230 V.

ARCHITECTURAL CHARACTERISTICS

The design of the attractive supporting structure takes into account esthetic, technical and functional aspects of the streetlight in order to optimize both energy generation and lighting of the surrounding area while minimizing maintenance.

The supporting structure maintains the capture field oriented south at an inclination of 35° to the horizontal, an orientation that maximizes annual solar electricity generation 🌞

