

brilliance in lighting

photinus

DATASHEET 2017

merkur 220 - BAHRAIN



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merkur220

SELF-SUFFICIENT SOLAR LED STREET LAMP WITH HIGHEST SECURE SUPPLY

APPLICATION

The merkur220 stands out for its exceptional, cubic design and guarantees a secure supply in all different climate zones. The merkur220 solar light is a solar powered LED street lamp, which is used in regions without electrical infrastructure or in which it would not be economically feasible to implement one. The luminaire is especially used in areas that demand a secure supply and excellent light quality even in dim conditions. The merkur220 is able to generate sufficient energy via the diffuse light component in regions with poor weather (snow, fog, etc.) due to the cubic aluminium construction with 5 photonus High Performance photovoltaic modules. The vertically arranged modules prevent snow from accumulating on it in winter. A sophisticated energy management system guarantees secure functionality over several nights even in poor weather conditions. The merkur220 is best suited for residential streets, side streets, cycle routes and footpaths as well as car parks etc. in accordance with DIN EN13201 due to its light output.

OPERATION

The integrated battery is loaded via 5 photonus high performance photovoltaic modules and powers efficiently the LED array during the night.

OPTIONS

Anthracite is our standard colour for the merkur220. Nevertheless, the luminaire can be ordered in all RAL colours for large projects and at an additional charge.

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TECHNICAL DATA

SOLAR TOWER

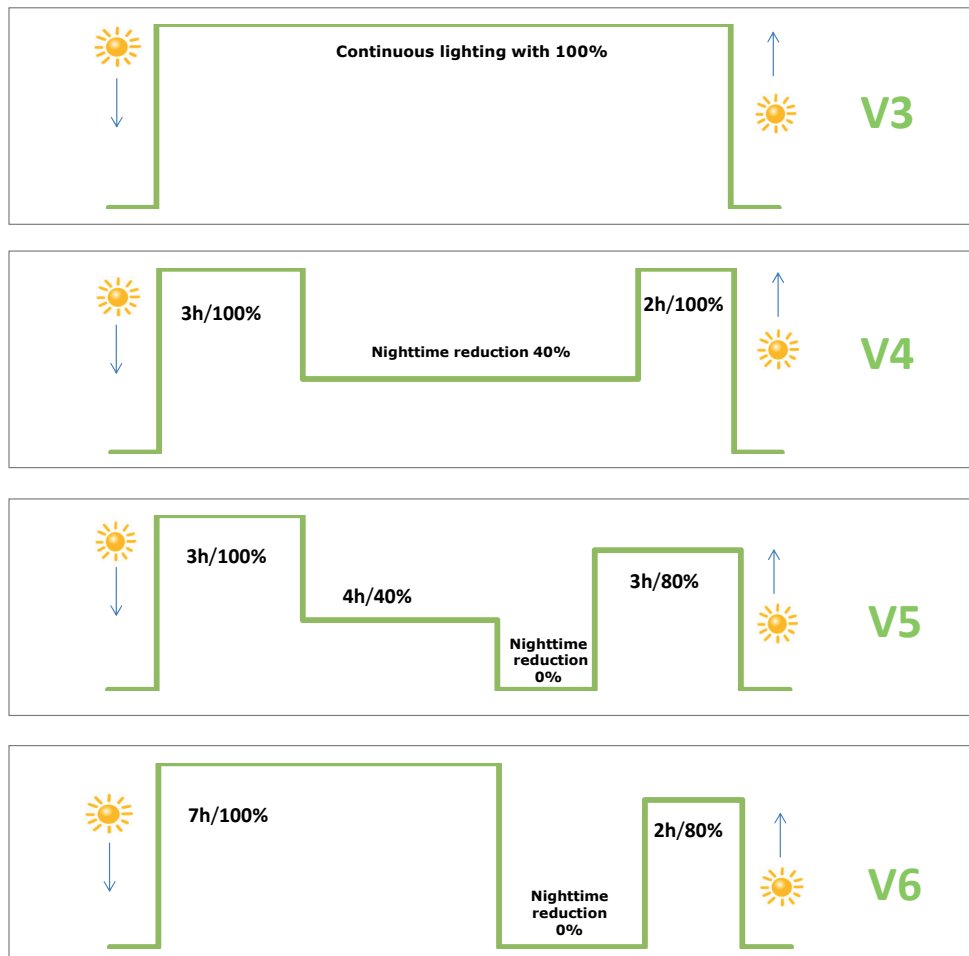
Solar modules	5 monocrystalline silicon cells with exceptional efficiency specially processed by photonus.
Efficiency	21,5 %
Max. performance of the energy column Pmpp	225 W / 5 solar modules, modules are also charged up in cloudy conditions.
Battery	LiFePO ₄ 845Wh 13,2 V 66Ah
Operating temperature	- 20°C bis + 60°C
Protection class	Cycle stability 8 to 10 years (depending on ambient temperature)

LIGHTS

Max. luminous flux	8000lm
Efficiency	max. 200lm/W
LED module / max. watts	100 W
Max. back-up time	3 days
Colour temperature	5000 K
Optics Light distribution	situational
Life of LED	> 100 000 h
Protection class	IP65

ENERGY AND TIME MANAGEMENT

Standard factory setting V3



MAINTENANCE CYCLES / WARRANTY

Battery change recommended	after 8 - 10 years
LED change recommended	after 10 years
Material warranty	2 years (incl. battery)
PV module warranty (The warranty period starts on the date of production)	2 years with 100% product guarantee 5 year warranty at 90% minimum output 10 year warranty at 80% minimum output

(subject to technical modifications)

DIMENSIONS

Total height from ground level	6122 mm
Height of light from ground level	6000 mm
Height of vandalism protection	4800 mm
Height of energy column	1200 mm

