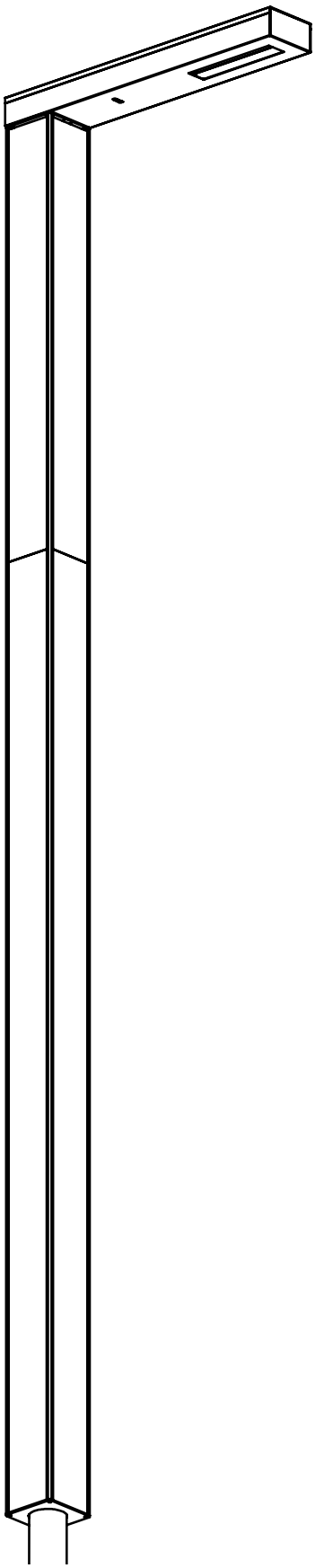
brilliance in solar lighting

photinus

DATASHEET V1|2019

merkur150



GERMAN DESIGN AWARD WINNER 2019

1

merkur150

SELF-SUFFICIENT SOLAR LED STREET LAMP

APPLICATION

The merkur150 stands out for its exceptional, cubic and modern design and guarantees a secure supply in all different climate zones. The merkur150 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 merkur150 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 4 photinus 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 merkur150 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 4 photinus high performance photovoltaic modules and powers efficiently the LED array during the night.

OPTIONS

Anthracite is our standard colour for the merkur150. Nevertheless, the luminaire can be ordered in all RAL colours for large projects and at an additional charge.

GUARANTEE

5 years

The warranty of the solar illumination is provided, as far as the illumination is installed like described in the installation instructions. The warranty is void, if the product settings haven´t been changed by photinus authorized employees/partners and/or using non-photinus approved tools.

2

TECHNICAL DATA

SOLAR MODULES

Solar modules	Monocrystalline silicon cells with exeptional efficiency specially processed by photinus.
Efficiency	20 %
Max. performance of the energy column Pmpp	140 Wp / 4 solar modules, they are also charged up in cloudy conditions

BATTERY IN THE POLE

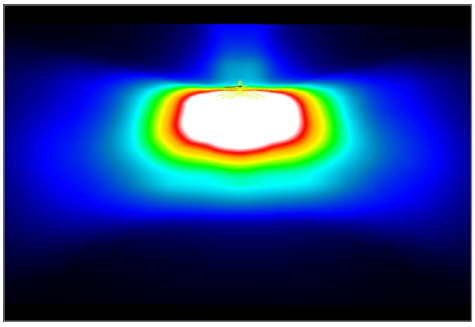
Battery	LiFePO4 / 481 Wh (12,8 V 36Ah)
Operating temperature	- 20°C to + 60°C
Life of battery	up to 10 years
Protection class	IPX8

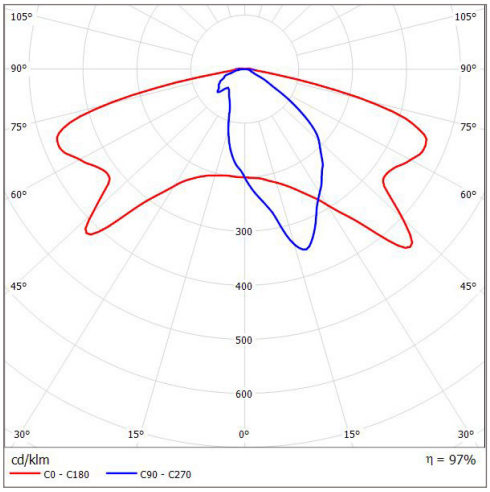
LIGHTS

Max. luminous flux	8000 lm (Bregenz site / 47 degrees latitude / 1400 lm / V5)
Max. Efficiency	200 lm/W
LED module / max. watts	100 W
Max. back-up time	Location: Normal Mode /Smart Mode 52 degrees latitude (Amsterdam): 9 days / 13 days 47 degrees latitude (Munich): 7 days / 10 days 40 degrees latitude (Madrid): 3 days / 5 days
Colour temperature	4000 K
Life of LED	> 75 000 h (L80)
Protection class	IP67

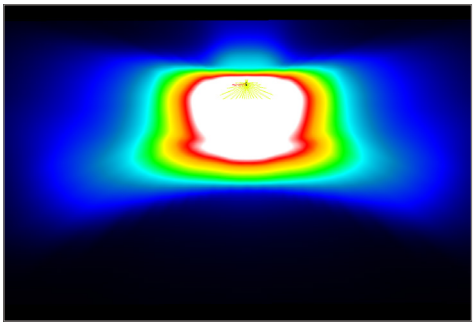
OPTIC

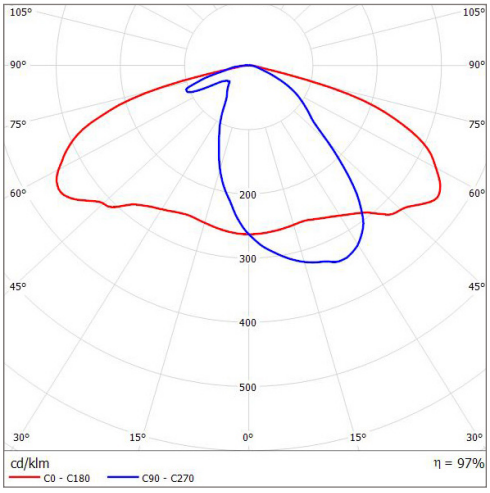
SCL OPTIK
optimal for streets with a width
from 2m to 4m
(cicle paths, walkways and small streets)





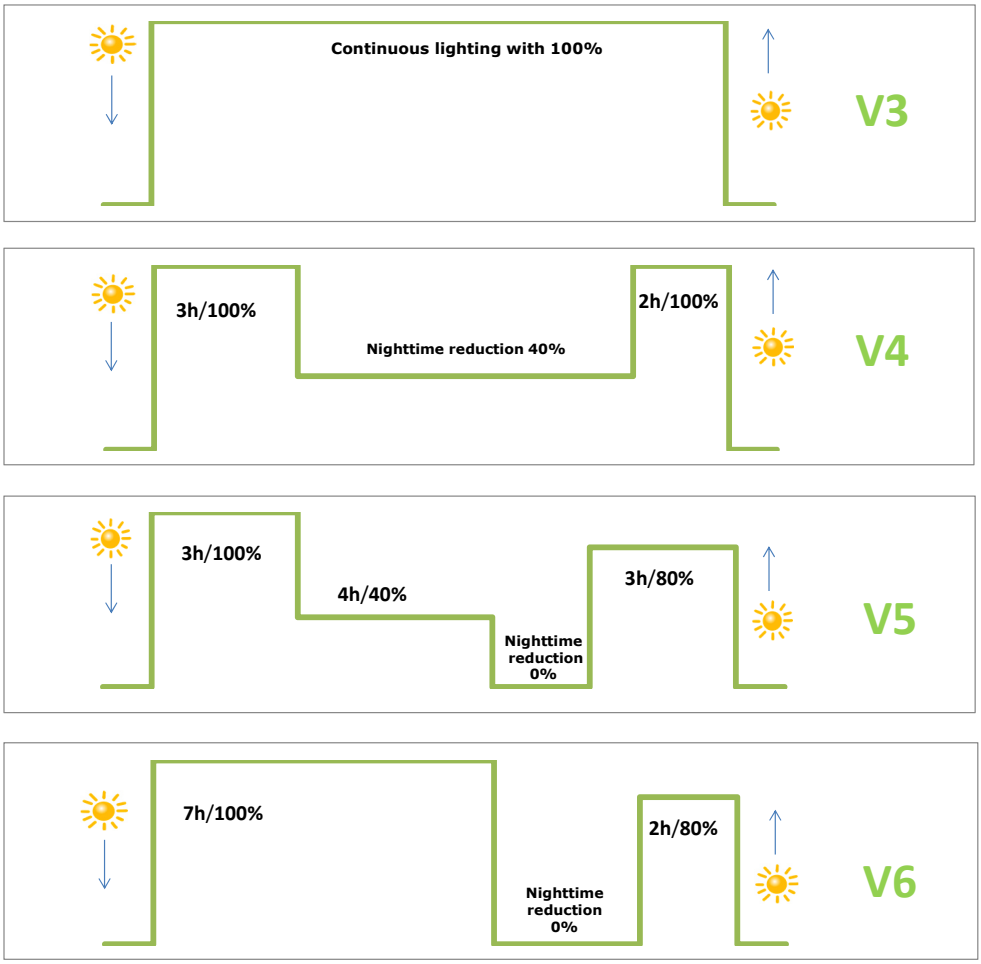
DWC OPTIK
optimal for streets with a widht from 4m
to 7m (Residential roads, secondary roads
and main roads, depending on location)





ENERGY AND TIMEMANAGEMENT

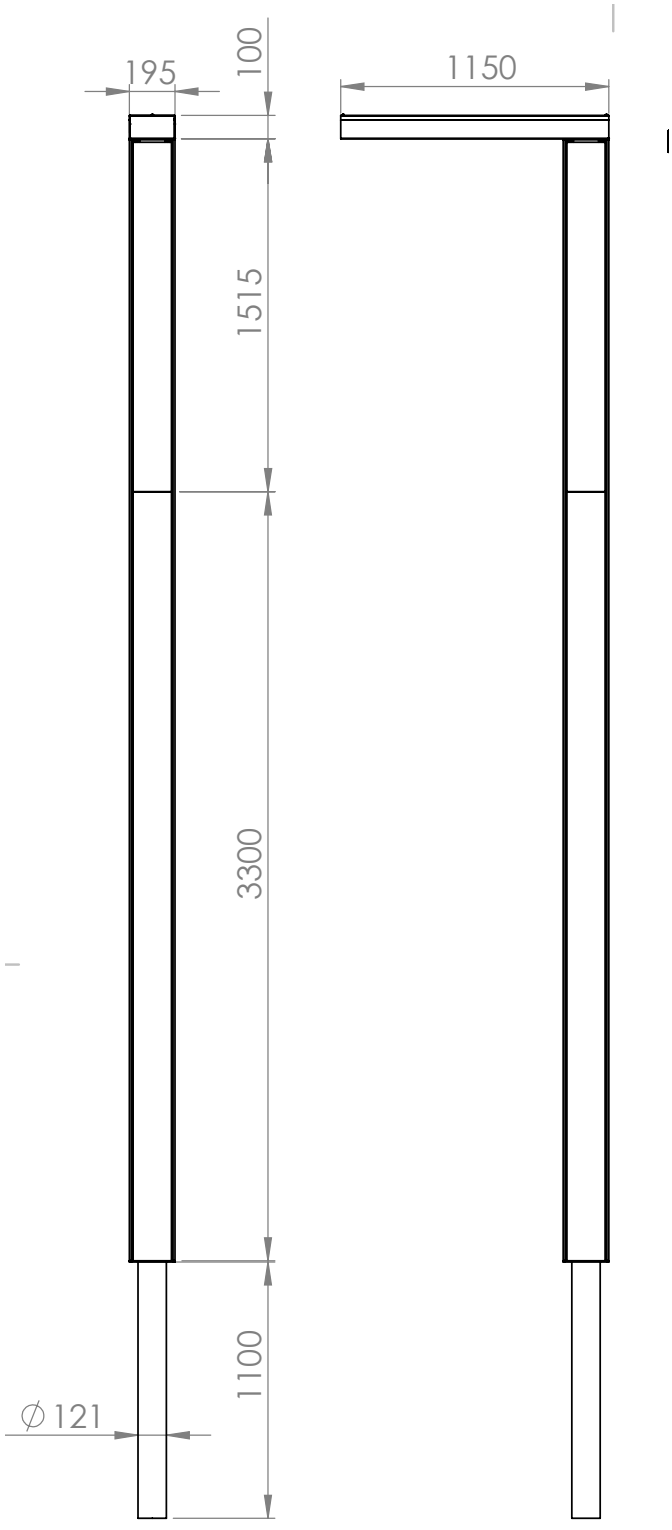
Standard factory setting V5



DIMENSIONS

Total height from ground level	**4930 mm**
Height of light from ground level	**4800 mm**
Height of vandalism protection	**3300 mm**
Height of energy column	**1500 mm**
Length of pole under ground	**1100 mm**
Total length of pole (galvanised steel)	**6000 mm**

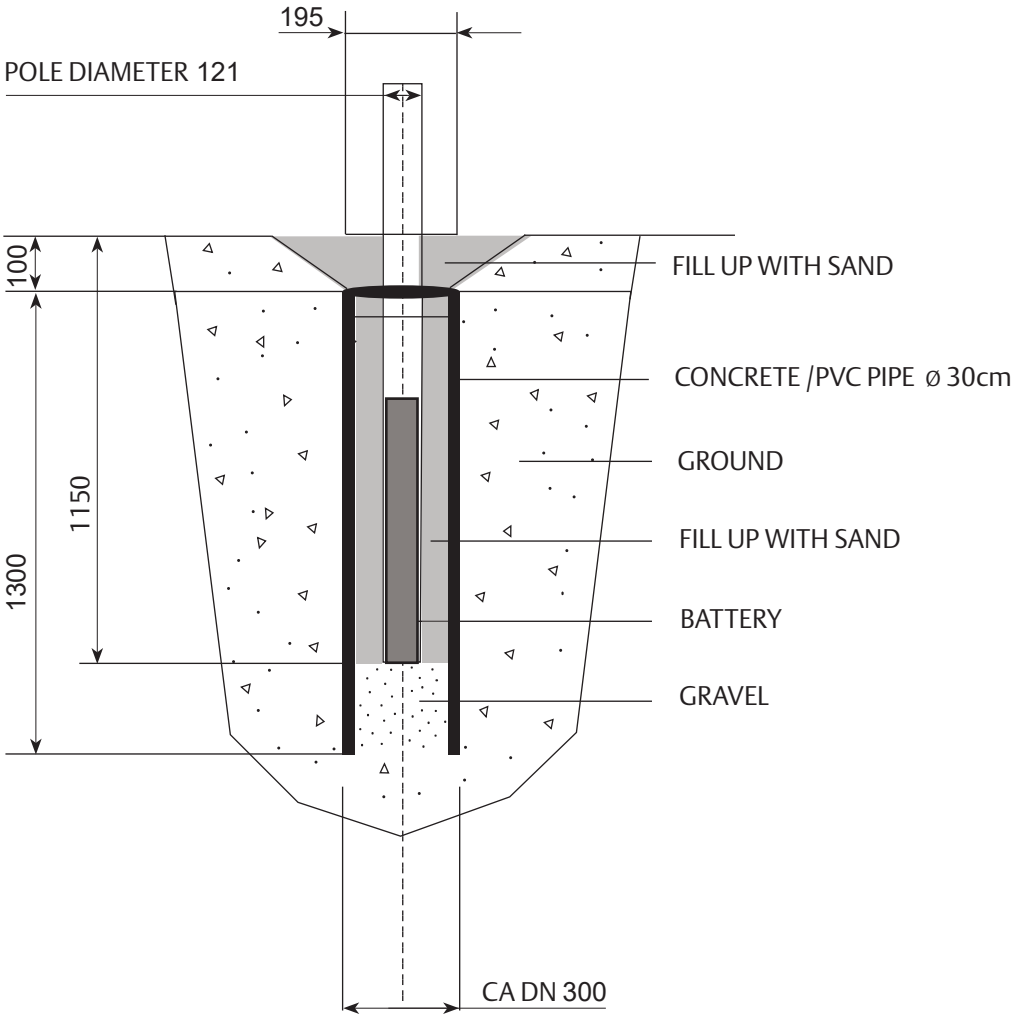
DIMENSIONS MERKUR150



3

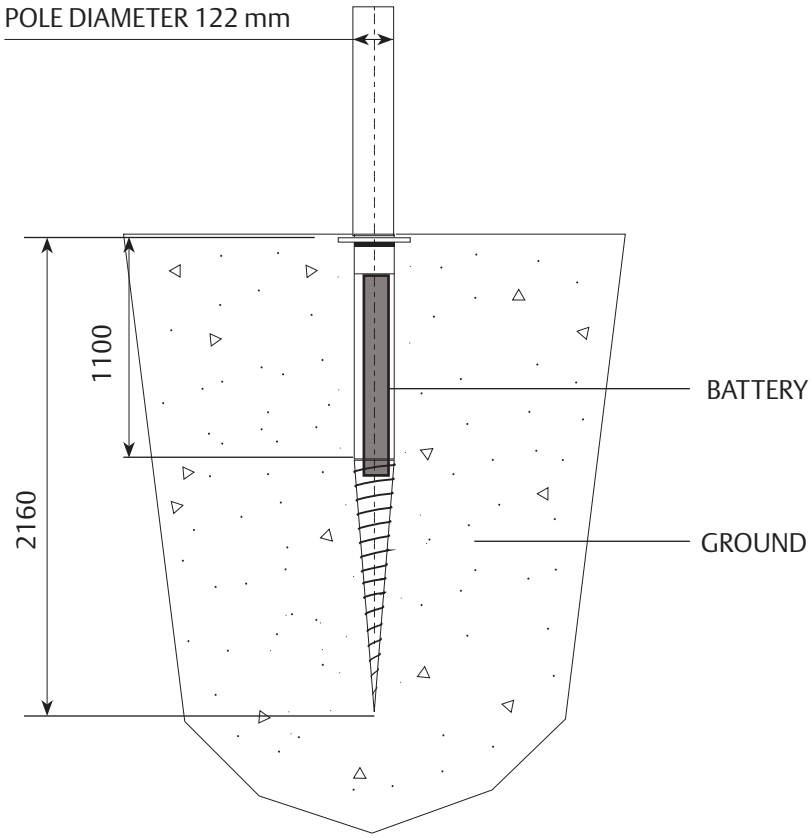
OPTIONS FOR ASSEMBLY

OPTION 1 - PIPE FOUNDATION



OPTION 2 - KRINNER GROUND SCREW

merkur Ground Screw



brilliance in lighting
photinus

Photinus GmbH & Co KG
www.photinus.at

Commercial Register: FB 278478b
UID: AT U62806823