

# photinus

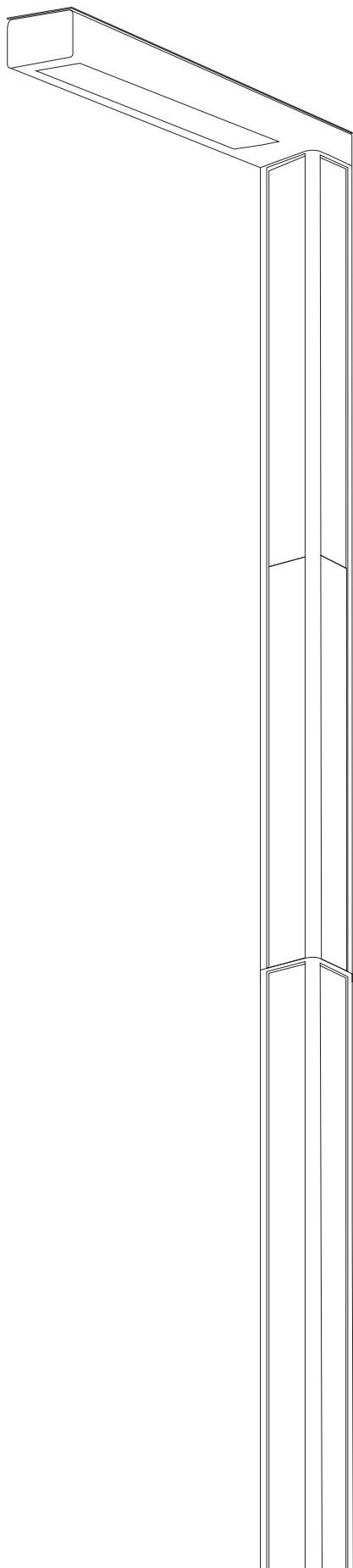
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**DATASHEET V3|2017**

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**merkur300**

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# 1

## **merkur300**

### **SELF-SUFFICIENT SOLAR LED STREET LAMP WITH HIGHEST SECURE SUPPLY**

#### **APPLICATION**

The merkur300 stands out for its exceptional, cubic design and guarantees a secure supply in all different climate zones. The merkur300 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 merkur300 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 8 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 merkur300 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 8 photonus high performance photovoltaic modules and powers efficiently the LED array during the night.

#### **OPTIONS**

Anthracite is our standard colour for the merkur300. Nevertheless, the luminaire can be ordered in all RAL colours for large projects and at an additional charge.

# 2

## TECHNICAL DATA

### SOLAR MODULES

<b>Solar modules</b>	Monocrystalline silicon cells with exceptional efficiency specially processed by photonus.
<b>Efficiency</b>	21.5 %
<b>Max. performance of the energy column Pmpp</b>	300 Wp / 8 solar modules, they are also charged up in cloudy conditions

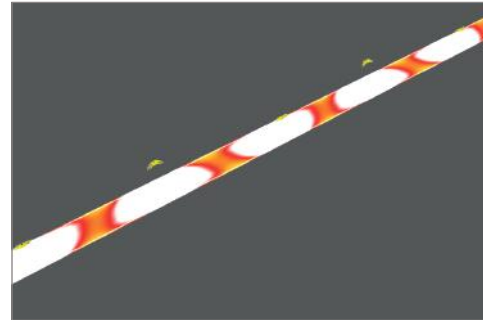
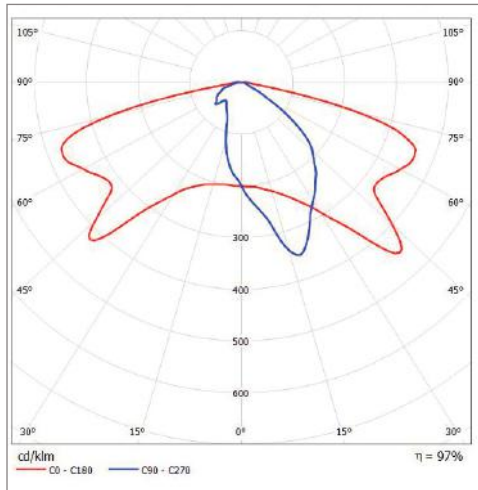
### BATTERY (IN THE POLE)

<b>Battery</b>	LiFePO <sub>4</sub>   12,8 V 36Ah (461Wh) or 66Ah (845Wh) (depending on location/latitude)
<b>Operating temperature</b>	- 20°C bis + 60°C
<b>Life of battery</b>	approx. 10 years
<b>Protection class</b>	IPX8

### LIGHTS

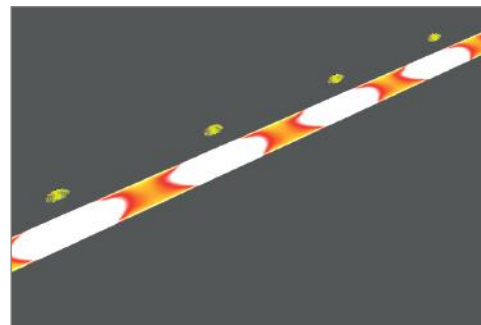
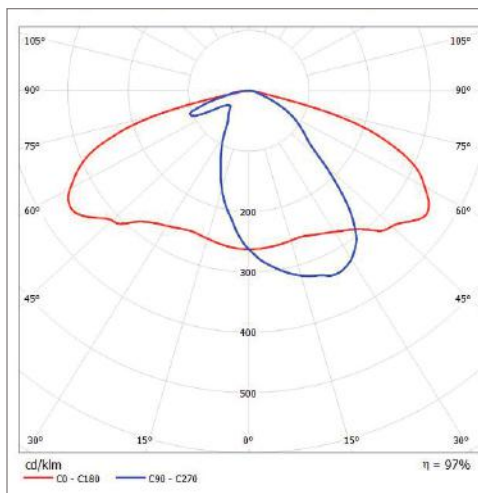
<b>Max. luminous flux</b>	8000lm (Bregenz site / 47 degrees latitude / 2800 lm / V5)
<b>Efficiency</b>	max. 200lm/W
<b>LED module / max. watts</b>	100 W
<b>Max. back-up time</b>	18 days (Bregenz site, 47 degrees latitude: 7 days) „Intelligent plus Modus“ 18 days (Bregenz site: 12 days)
<b>Colour temperature</b>	4000 K
<b>Life of LED</b>	> 100 000 h
<b>Protection class</b>	IP67

## OPTIC



### SCL OPTIK

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



### DWC OPTIK

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

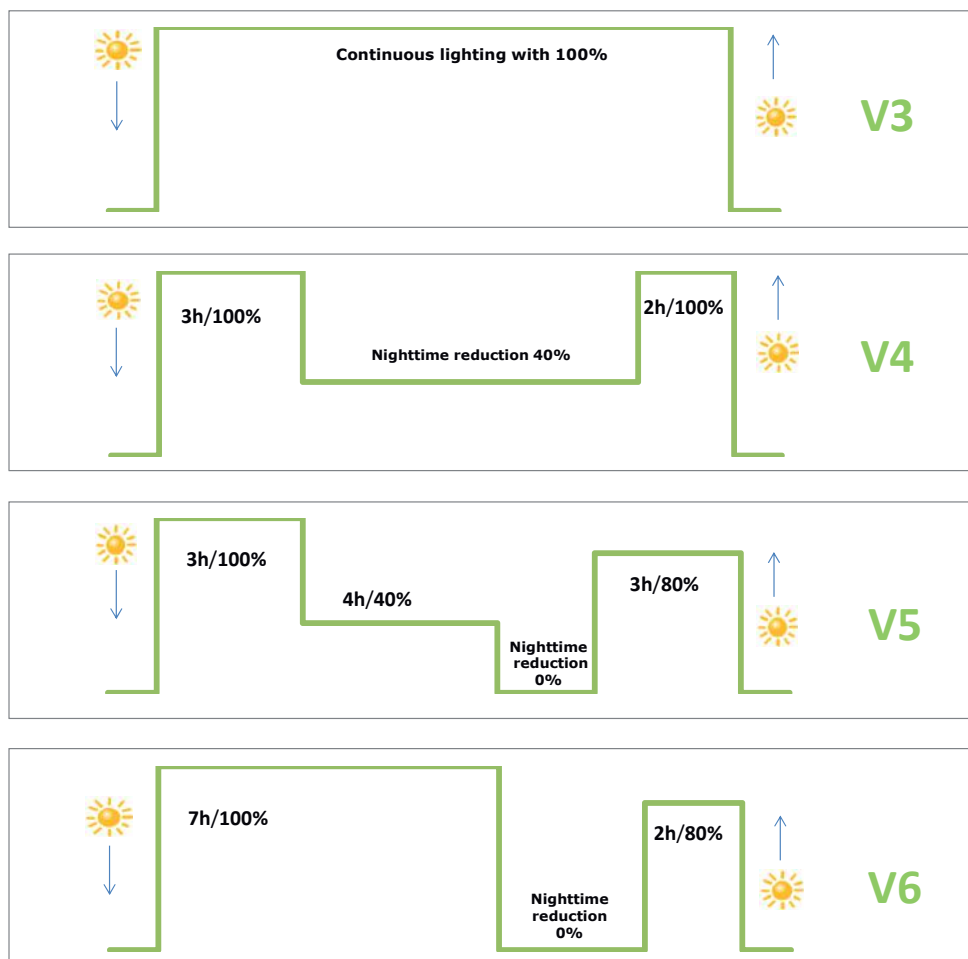


The special photinus LED luminaires combine the advantages of SCL and DWC optics to achieve optimal light distribution.

Additional optics for special applications are possible upon request.

## ENERGY AND TIME MANAGEMENT

### Standard factory setting V5



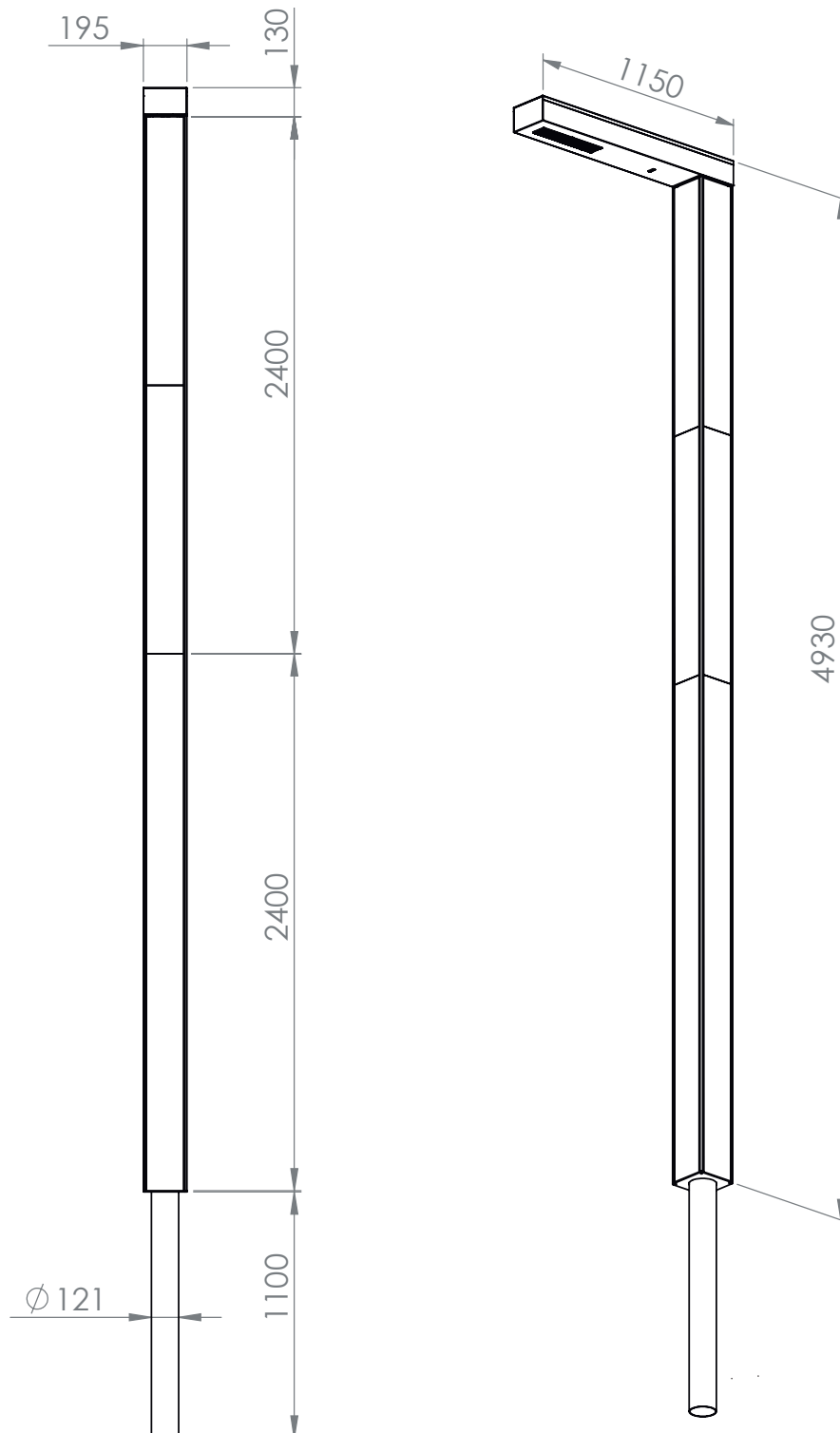
## WARRANTY

<b>Manufacturer's warranty</b>	2 years (incl. battery)
<b>PV module warranty</b> (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

<b>Total height from ground level</b>	<b>4930 mm</b>
<b>Height of light from ground level</b>	<b>4800 mm</b>
<b>Height of vandalism protection</b>	<b>2400 mm</b>
<b>Height of energy column</b>	<b>2400 mm</b>
<b>Length of pole under ground</b>	<b>1100 mm</b>
<b>Total length of pole (galvanised steel)</b>	<b>6000 mm</b>

**DIMENSIONS MERKUR<sub>300</sub>**



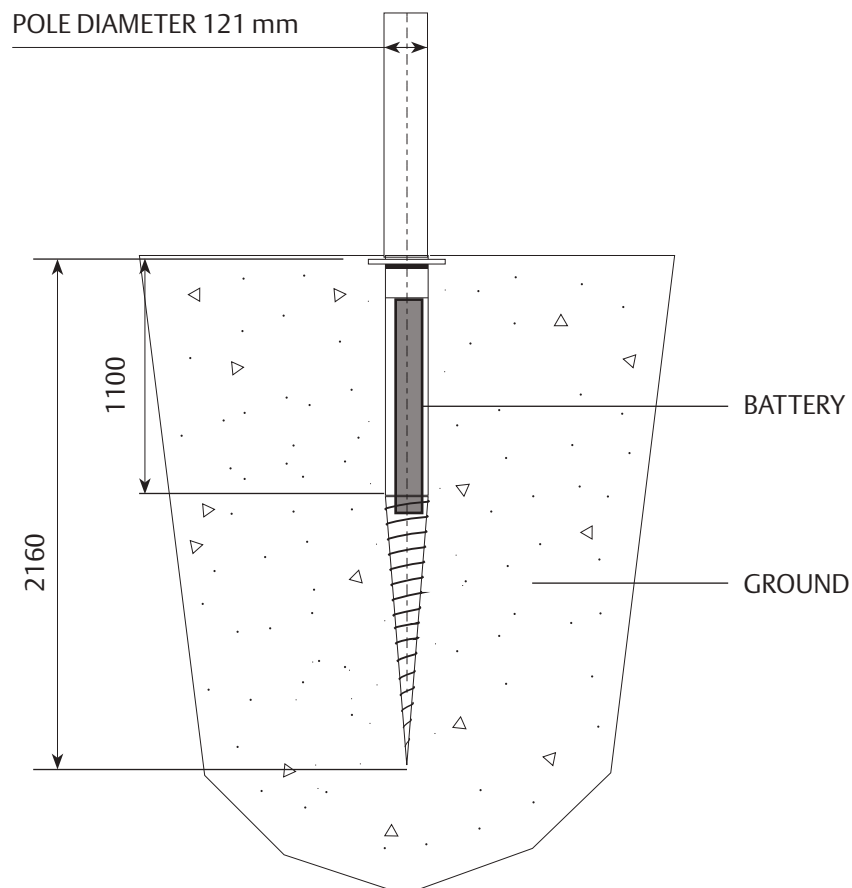
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## OPTIONS FOR ASSEMBLY

### OPTION 1 - KRINNER GROUND SCREW

#### KRINNER Ground Screw

Art. 25513: KSF E194x2100-RG140-SMU151



**OPTION 2 - PIPE FOUNDATION**

