

Datasheet

protos125 / protos125 Duo



protos125



protos125 duo

SELF-SUFFICIENT SOLAR LED STREET LAMP

USAGE

It is „functional with appealing design“ and it is called protos. It is a self-sustaining, exterior solar LED lamp with various technical options. The energy supply is based on an efficient mono-crystalline photovoltaic module, the inclination of which can be adjusted.

Intelligent controls with independent day- and night-time recognition enables different time programs. Given the short assembling and disassembling times, protos is excellently suitable as street lighting or for temporary usage wherever cordless lighting is required, such as construction sites, parking lots, access roads, outdoor events or company premises.

The high-efficiency LEDs and advanced optical components ensure impressive light distribution. Protos meets the country-specific light-technical requirements of DIN 13201 for residential streets with low traffic, cycle paths and footpaths, parking lots and company premises.

FUNCTION

The integrated battery is charged during daytime by the efficient photovoltaic solar module. At night-fall, the LED light module is automatically activated.

The light output of a solar lamp is defined by the incident solar irradiation at the respective location, which is why the quality of the individual components and their optimum interaction play a decisive role.

The LiFePo4 battery used in protos is shored in the ground together with the post so that an optimum, constant temperature is achieved. The long service life of the battery and efficient theft protection are the results.

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.

| SOLAR LIGHT | | protos125 / protos125 Duo |
|------------------------------|--|----------------------------------|
| SOLAR MODULE | | |
| Solar modul | Monocrystalline silicon cells | |
| Module performance | 125 Wp | |
| Module dimensions | 1010 x 680 x 35 mm | |
| Open Circuit Voltatge (VOC) | 22.40V±0.5 | |
| Short Circuit Current (ISC) | 5.83A±0.2 | |
| Maximum Power Voltage (Vmp) | 18.20V±0.5 | |
| Maximum Power Current (Imp) | 5.50A±0.2 | |
| Protection class | IK06 | |
| BATTERY (IN THE POLE) | | |
| Battery | LiFeP04 / 474 Wh (12,8 V 37Ah) | |
| Operating temperature | -20°C to +60°C | |
| Battery life | up to 10 years | |
| Protection class | IPX8 | |
| LIGHTS | | |
| Max. luminous flux | Depending on the location where the light is staying. Location: Luminous flux / autonomy time normal mode / smart mode 52. degrees lat. (Amsterdam): 8 W, 1380 lm / V5 / 8 days / 12 days 47. degrees lat. (Munich): 9 W, 1400 lm / V5 / 6 days / 9 days 40. degrees lat. (Madrid): 22 W, 3790 lm / V5 / 3 days / 5 days | |
| Efficiency | 200lm/W at 600mAh | |
| LED module / max. watts | 100 W | |
| Colour temperature | 4000K (By request changeable: Amber Light, 2000K, 3000K, 5000K) | |
| Life of LED | >75 000 h (L80) | |
| Protection-class | IP 67 | |
| MATERIALS | | |
| Pole | galvanised and powder-coated steel „Sparkling iron effect dark“ | |
| Metal parts | powder-coated aluminium „Sparkling iron effect dark“ | |

Technical changes reserved

| DIMENSIONS | |
|-----------------------------------|--|
| Total height from ground level | depending on the position of the solar module approximately 5328 mm at 62° |
| Height of light from ground level | 4200 mm |
| Total length of the pole | 5328 mm |
| Weight pole | 35 kg |
| Length of the pole in the ground | 1000 mm |
| Material pole | galvanized and powder-coated steel „Sparkling iron effect dark“ |
| Solar module dimensions | 1010 mm x 680 mm x 35 mm |
| Weight solar module | 8,5 kg |
| Light housing dimensions | 834 mm x 125 mm x 80 mm |
| Weight light housing | 3,3 kg |
| Wind load | Wind load zone 4, with 30m/s (110km/h) (Lloyds CLAME 2016) |

Salt spray test (ISO 9227:2012)

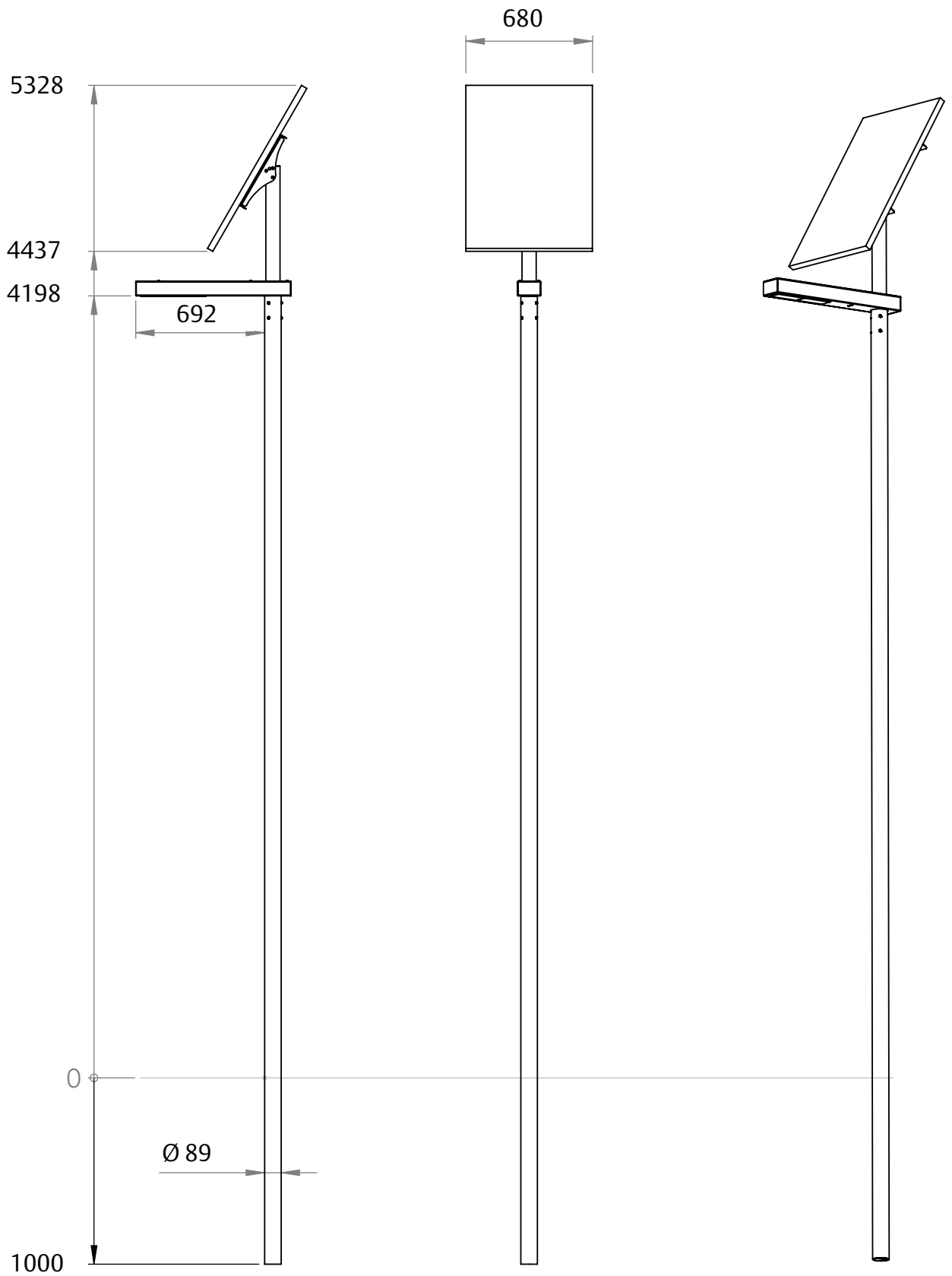
Corrosion test in artificial atmosphere - salt spray test (ISO 9227: 2012)

All solar lights have successfully passed the salt spray test.

Details

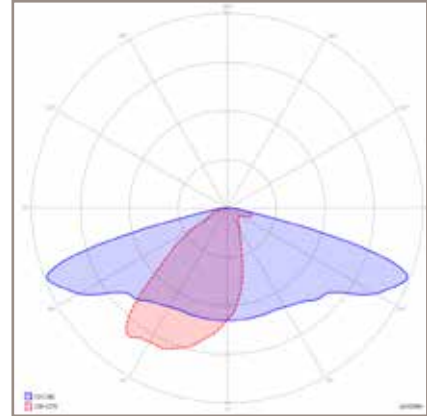
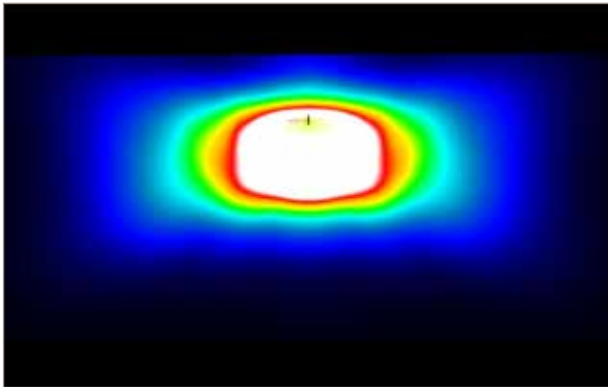


Dimensions



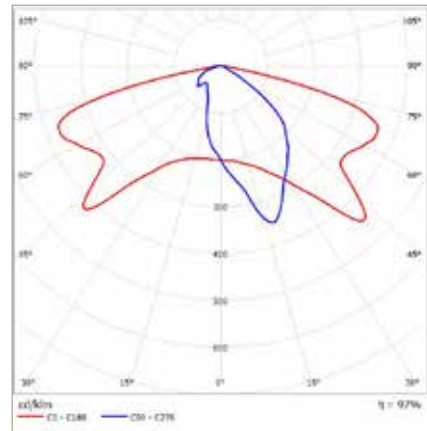
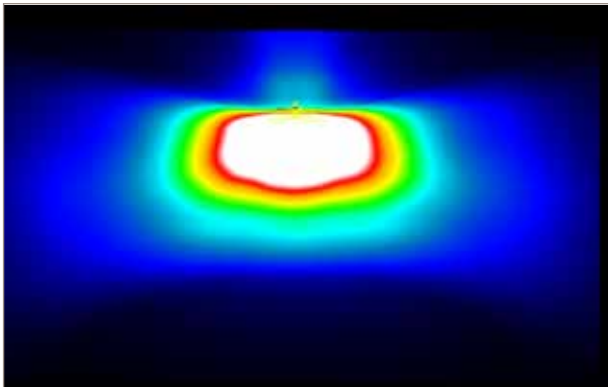
photinus OPTIC

Standard optic with optimum compromise between illumination width and illumination depth



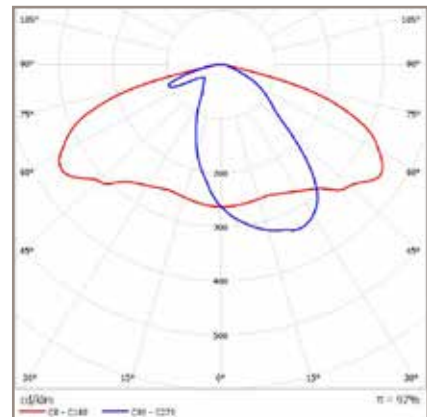
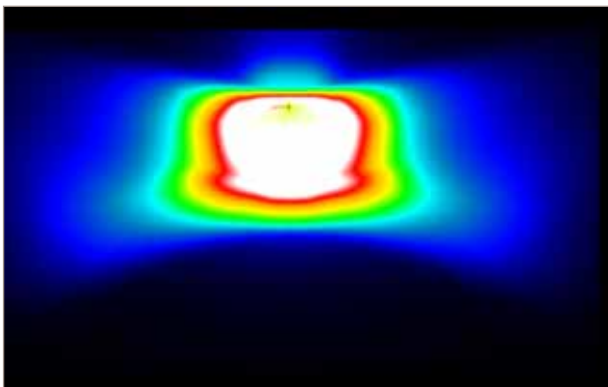
SCL OPTIC

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



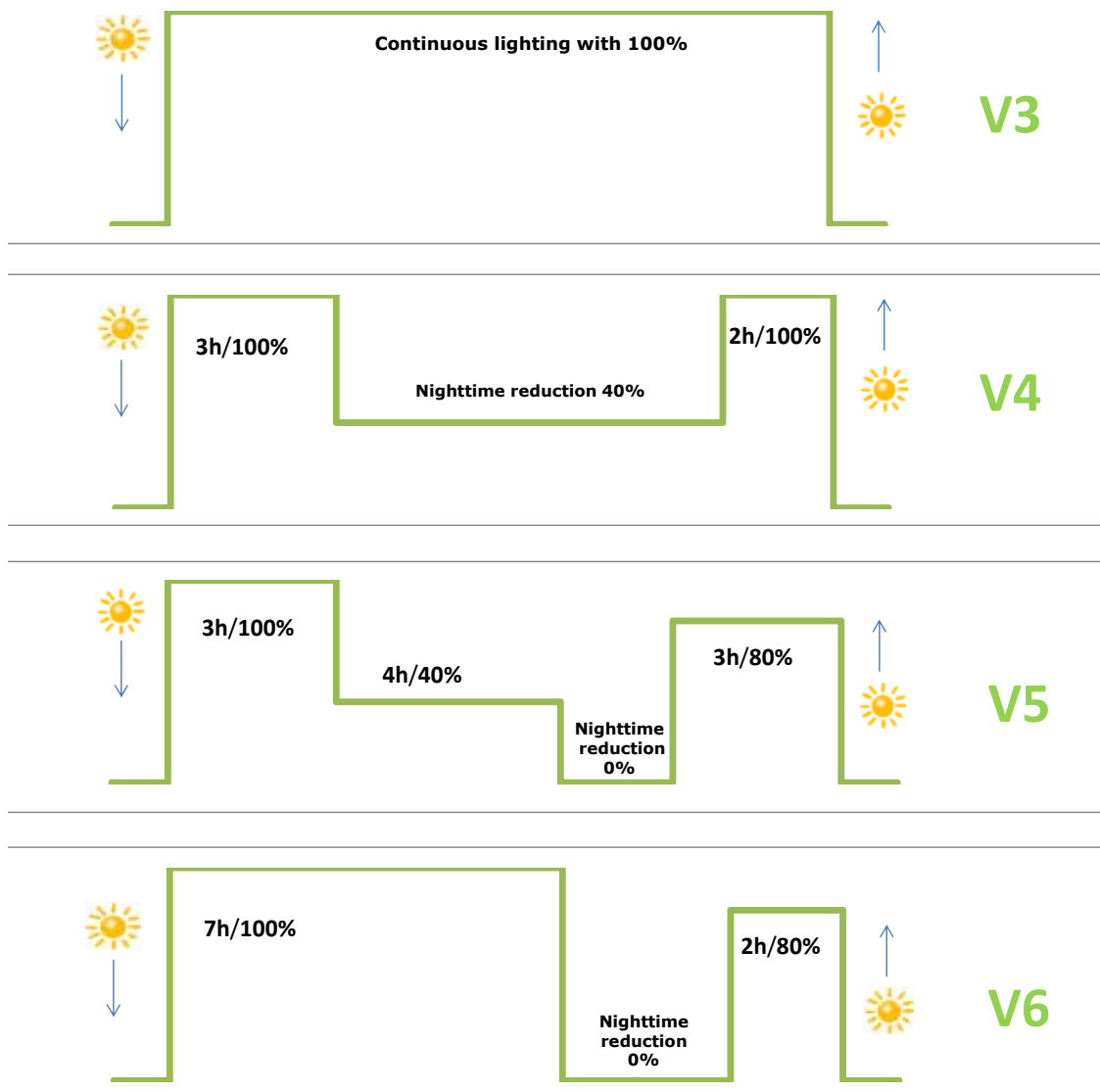
DWC OPTIC

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



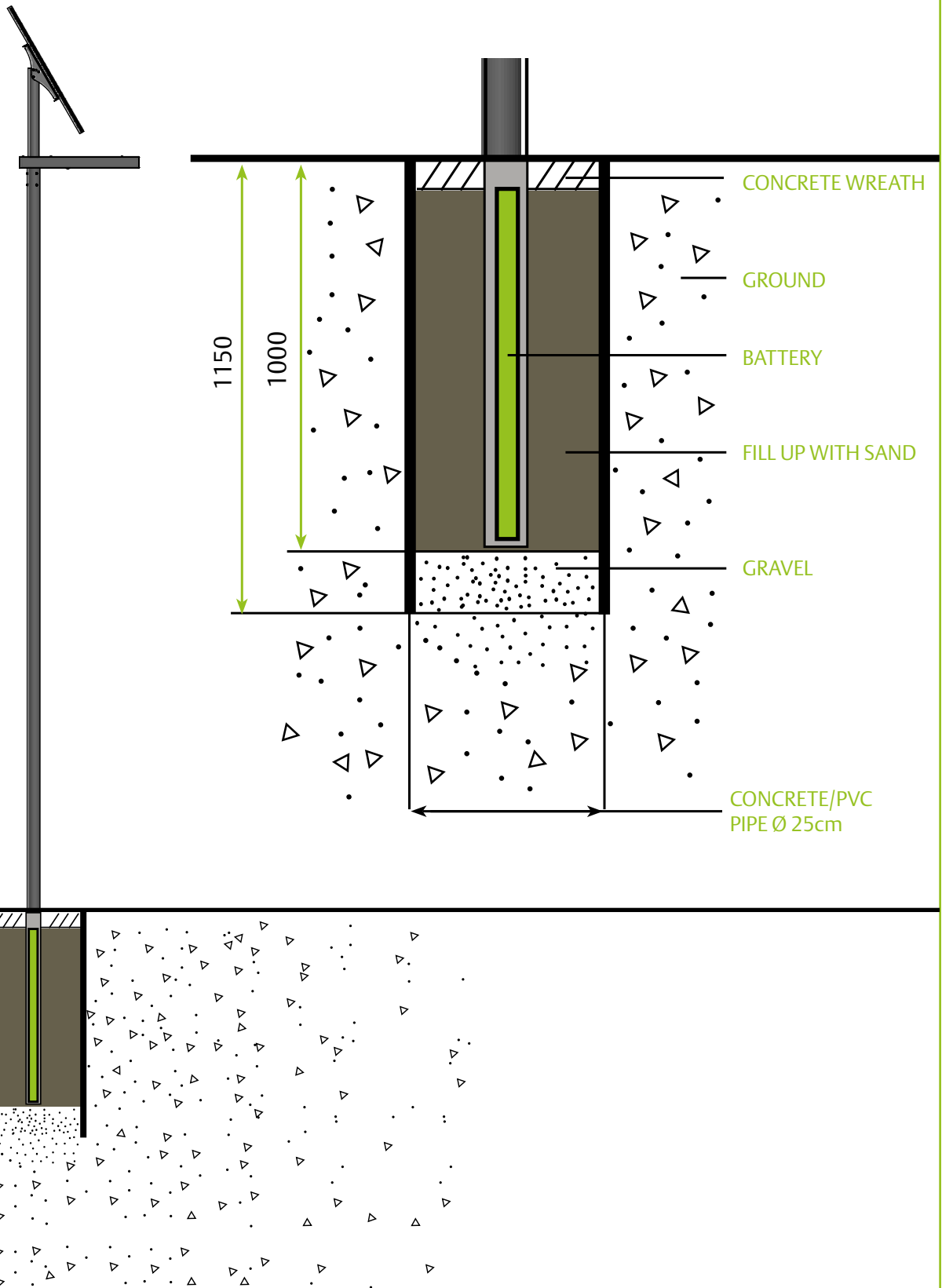
ENERGY AND TIME MANAGEMENT

Standard factory settings V5



Assembly

OPTION 1 - PIPE FOUNDATION

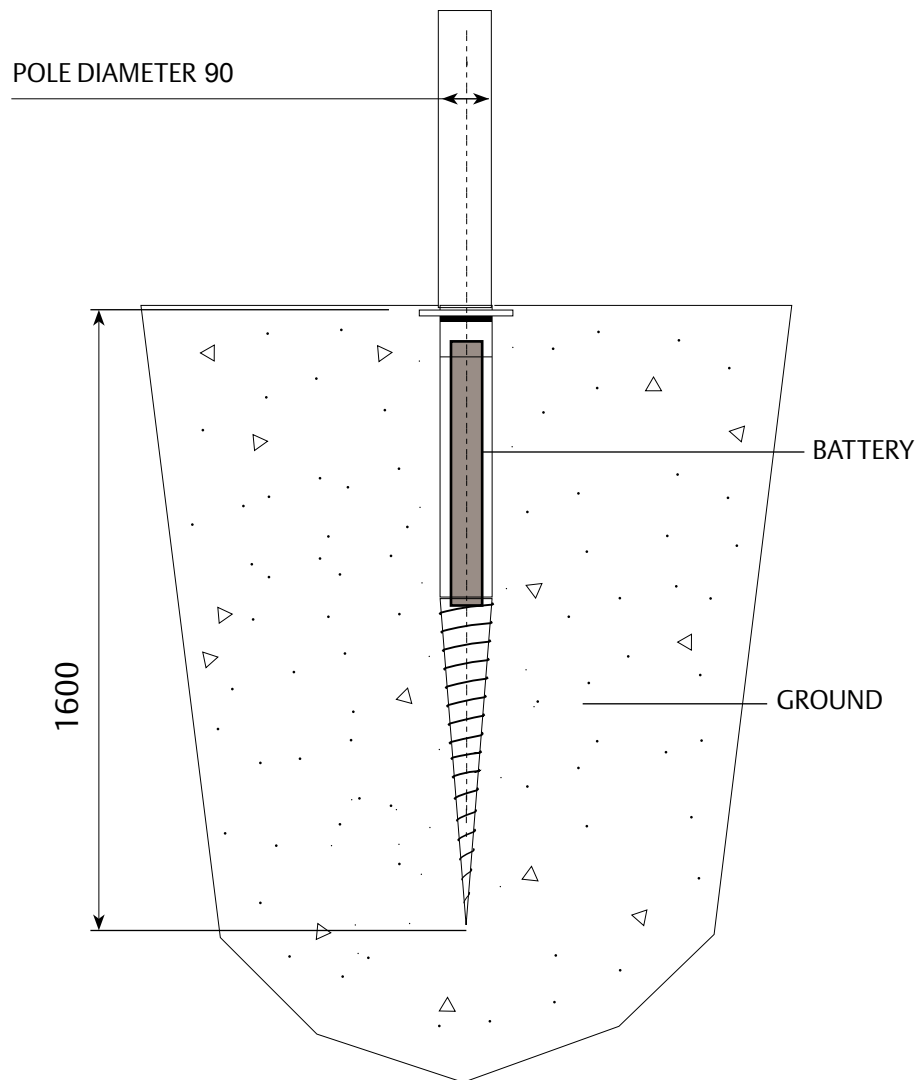


OPTION 2 - GROUND SCREW FOUNDATION

KRINNER Ground screw

Art. 26160: KSF E140x1600-E76-100

Art. 26813: Eccentric disk set - E90



References

protos
parc in Poznan / PL



protos
Altfrauenhofen / DE

protos
school ground / DE



References



protos
stairs Wilhelmberg / NL

protos
nature reserve / DE



protos
waterfall Elgafossen / NOR