Datasheet titania / titania duo





SELF-SUFFICIENT SOLAR LED STREET LAMP WITH INTEGRATED BACKLIT ADVERTISING AREA

APPLICATION

The titania solar illumination impresses with the combination of modern street light and beautiful light stele and guarantees the highest level of security of supply in practically all climate zones. The backlit pole gives streets a special flair. The vertical light fields can also be used as backlit advertising space.

The titania solar light is solar-powered LED street lighting that is used wherever there is no power supply or it would be uneconomical to implement. It is used in those places where maximum security of supply and the best quality of light are required, even in poor lighting conditions.

The titania 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 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 titania 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.

FUNCTION

The integrated battery is charged during daytime by the efficient photovoltaic solar modules. At nightfall, 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 his solar lamp 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 fas 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	titania
SOLAR MODULES	
Solar modules	Monocrystalline silicon cells with exeptional efficiency specially processed by photinus.
Efficiency	~22 %
Max. performance of the energy column Pmpp	300 Wp / 8 solar modules, they are also charged up in cloudy conditions.
Protection class	IK06
BATTERY IN THE POLE	
Battery	LiFeP04 / 1152Wh (12,8 V 90Ah) (depending on location/latitude)
Operating temperature	-20°C to +60°C
Life of battery	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, 2760 lm / V5 / 8 days / 12 days 47. degrees lat. (Munich): 9 W, 2800 lm / V5 / 6 days / 9 days 40. degrees lat. (Madrid): 22 W, 7580 lm / V5 / 3 days / 5 days
Max. Efficiency	200lm/W at 600mAh
LED module / max. watts	100 W light head // 30 W per light field
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	4920 mm
Height of light from ground level	4805 mm
Height of light field	2000 mm
Height of energy column	2405 mm
Total lenght of pole	4920 mm
Material pole	galvanised steel "Sparkling iron effect dark"
Lenght of pole under ground	1000 mm
Weight of solar light	110 kg
Wind load	Wind load zone 4, with 30m/s (110km/h) (Lloyds CLAME 2016)

Salt spray test (ISO 9227:2012)

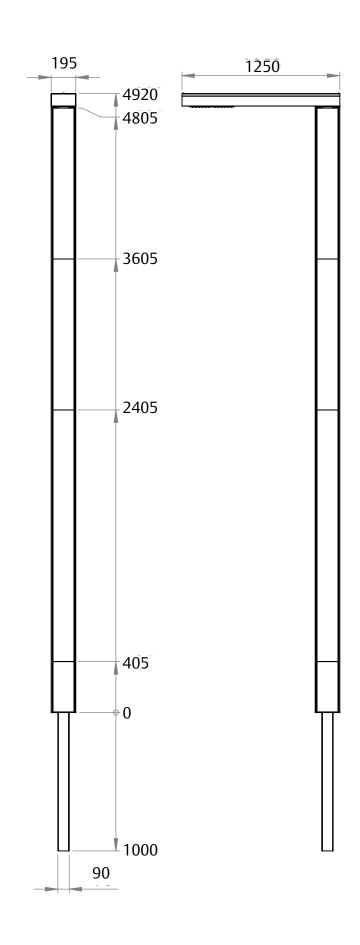
Corrosion test in artificial atmosphere - salt spray test (ISO 9227:2012)

All solar lights have successfully passed the salt spray test.

Details

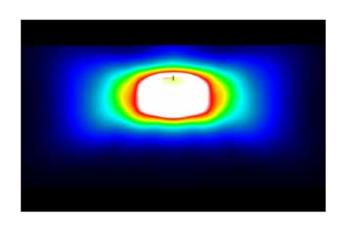


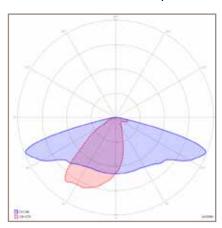




photinus OPTIC

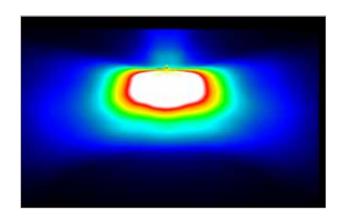
Standard optic with optimum compromise between illumination width and illumination depth

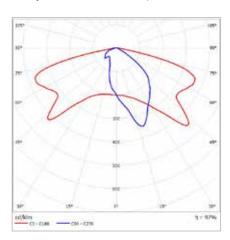




SCL OPTIC

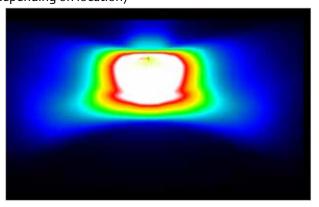
Optimal for streets with a width from 2m to 4m (cicle paths, walkways and small streets)

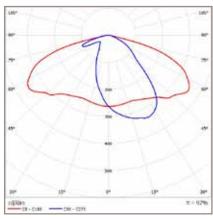




DWC OPTIC

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

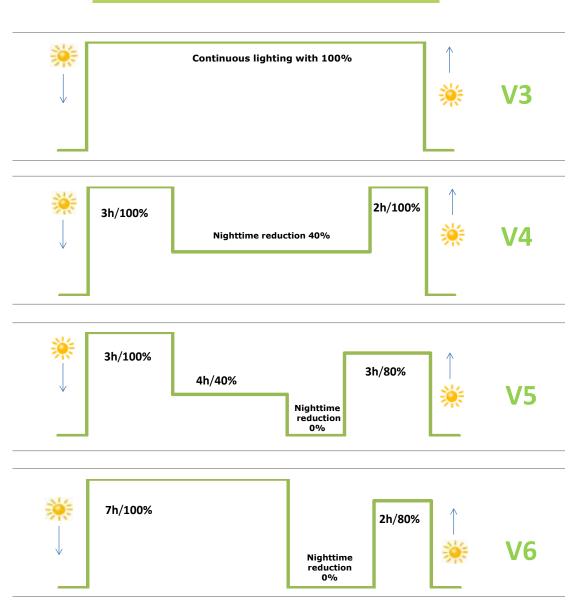




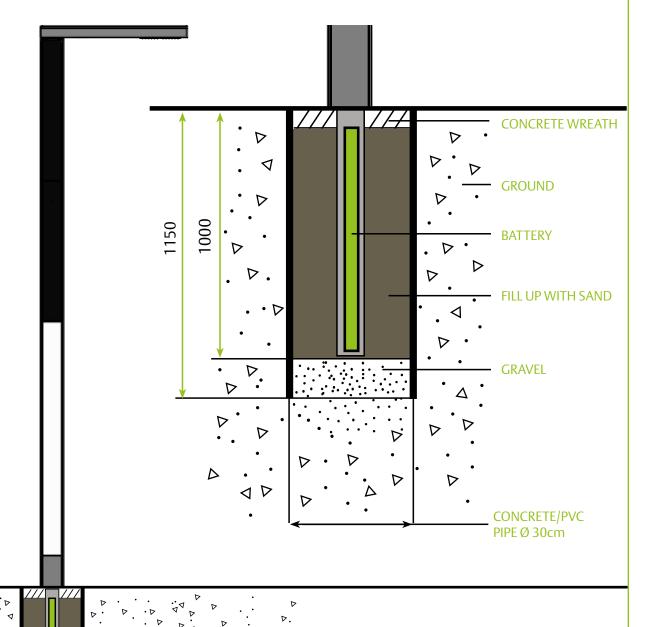


ENERGY AND TIMEMANAGEMENT

Standard factory setting V5



PIPE FOUNDATION



References

merkur Neuschwanstein / DE



protos stairs Wilhelminaberg / NL



juno graveyard / DE





monument / PL

aron Larnaka / CYP



alara Diyar Park / BHR