

Datasheet

Energytower



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SELF-SUFFICIENT ENERGYTOWER

USE

The energy tower impresses with its unusual, cubic design and guarantees maximum security of supply in practically all climates. This is a solar-powered system that is used wherever there is no power supply or it would be uneconomical to implement. It is used in those places where the highest security of supply and the best energy performance is required even in poor lighting conditions.

Due to the cubic aluminium construction with (photinus high performance photovoltaic modules, sufficient energy can be generated in a targeted manner via the diffuse light component especially in regions with poor weather (snow, fog, etc.). 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.

FUNCTION

The integrated battery is charged during daytime by the efficient photovoltaic solar module.

The energy output of a tower 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 LiFeP04 battery used in the energy tower 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 energy tower is provided, as far as the illumination is installed like described in the installation instruction. 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		Energytower
SOLAR MODULES		
Solar modules	Monocrystalline silicon cells with exceptional efficiency specially processed by photonus	
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 / 1152 Wh (12,8 V 90Ah)	
Operating temperature	-20°C to +60°C	
Max. Charging current	15A	
Max. Discharge current	15A	
Charging voltage	14,6V	
Standard charging current	9A	
Standard discharge current	9A	
Dimensions	Ø 110 x 900 mm	
Battery life	up to 10 years	
Protection class	IPX8	
MATERIALS		
Pole	galvanised and powder-coated steel „Sparkling iron effect dark“	
Metal parts	powder-coated aluminium „Sparkling iron effect dark“	
Charge regulator		
Charging current	8A	
Protection class	IP67	
MPPT charging	Ja	
Max. tracking efficiency	99,9	
Operating temperature	- 35 ~ + 60°C	
Output voltage	20 - 58V	
Output power	1 - 60W	
Own. consumption	5mA	
System voltage	12V	
Dimensions	85,5 x 81 x 23,1 mm	

Technical changes reserved!

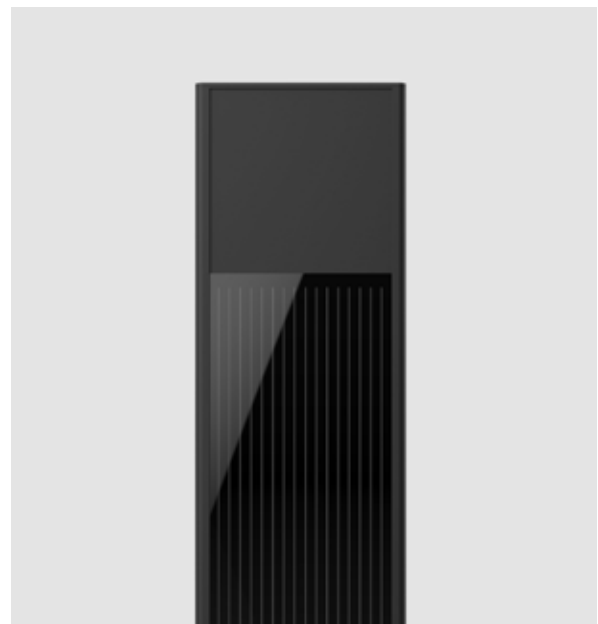
DIMENSIONS	
Total height from ground level	4820 mm
Height of vandalism protection	2400 mm
Length of the pole in the ground	1000 mm
Total weight	65 kg
Wind load	Wind load zone 4, with 30m/s (110km/h) (Lloyds CLAME 2016)

Salt spray test (ISO 9227:2012)

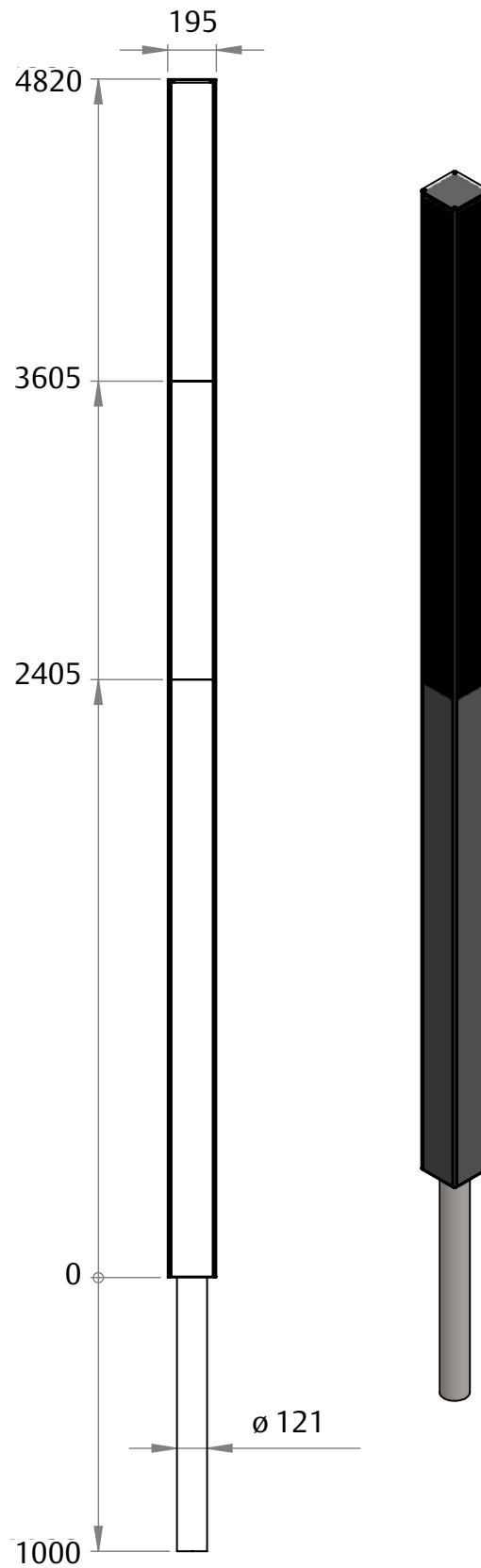
Corrosion test in artificial atmosphere - salt spray test (ISO 9227:2012)

All solar lights have successfully passed the salt spray test.

Details



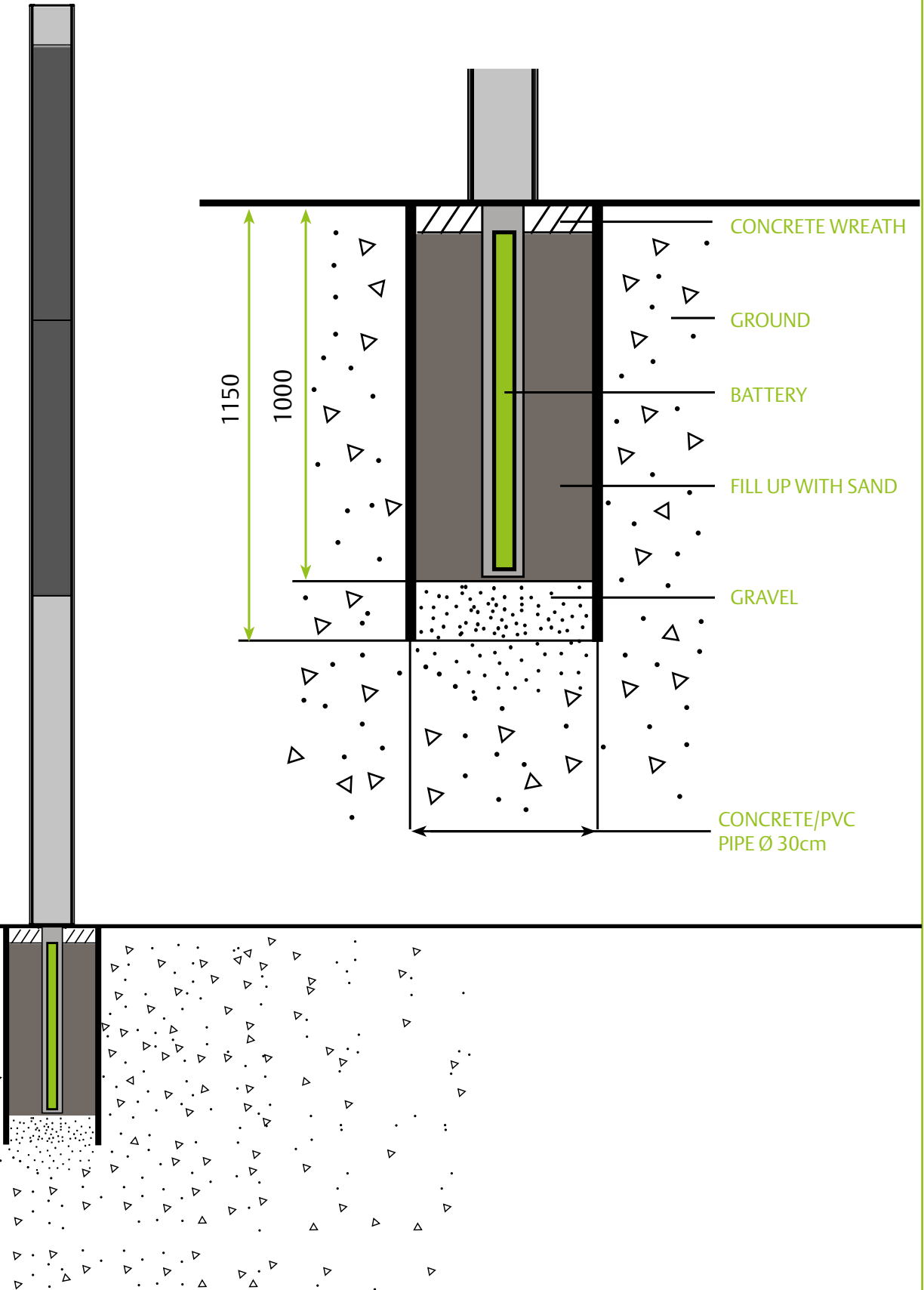
Dimensions



Option for assembly



PIPE FOUNDATION



REFERENCES

merkur
Neuschwanstein / DE



protos
stairs Wilhelmberg / NL



juno
graveyard / DE



REFERENCES



hera
monument / PL

aron
Larnaka / CYP



alara
Diyar Park / BHR