

Datasheet

E-bike charging station



Energytower with
e-bike charging station



SELF-SUFFICIENT E-BIKE CHARGING STATION

USE

The solar e-bike charging station is a revolutionary, self-sufficient energy power plant and also impresses with its unusual, cubic design. The charging station 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 12 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 e-bike charging station 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 e-bike charging station 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.

Energytower	Solar e-bike charging station
SOLAR MODULES	
Solar modules	Monocrystalline silicon cells with exceptional efficiency specially processed by photinus
Efficiency	~22 %
Max. performance of the energy column Pmpp	900 Wp / 12 solar modules, they are also charged up in cloudy conditions.
Protection class	IK06
BATTERY (IN THE POLE)	
Battery	2 x 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 steel
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	4800 mm
Height of vandalism protection	1000 mm
Length of the pole in the ground	1200 mm
Total weight	130 kg
Wind load	Wind load zone 4, with 30m/s (110km/h) (Lloyds CLAME 2016)

Salt spray test (ISO 9227:2012)

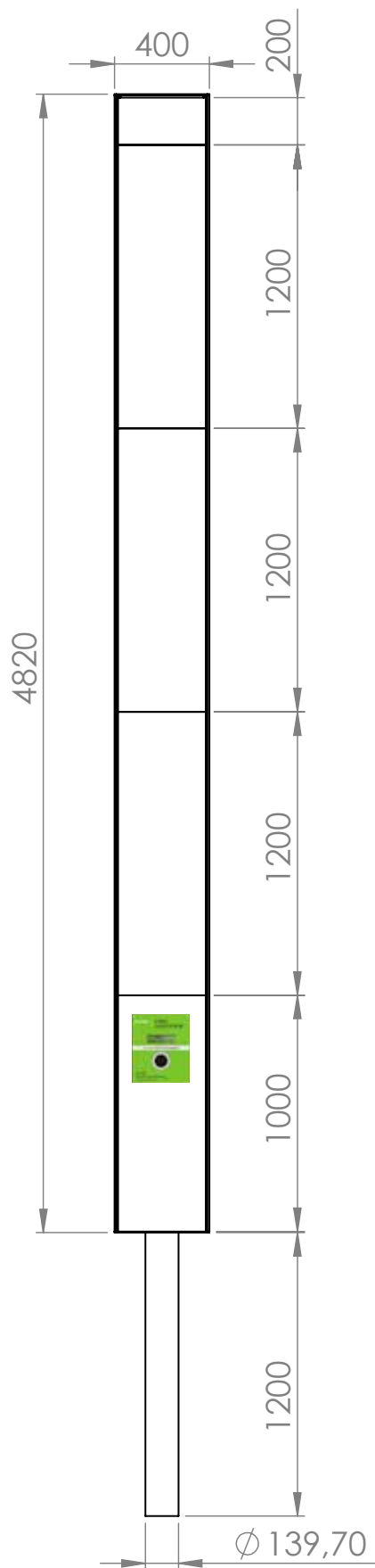
Corrosion test in artificial atmosphere - salt spray test (ISO 9227:2012)

All solar lights have successfully passed the salt spray test.

Details



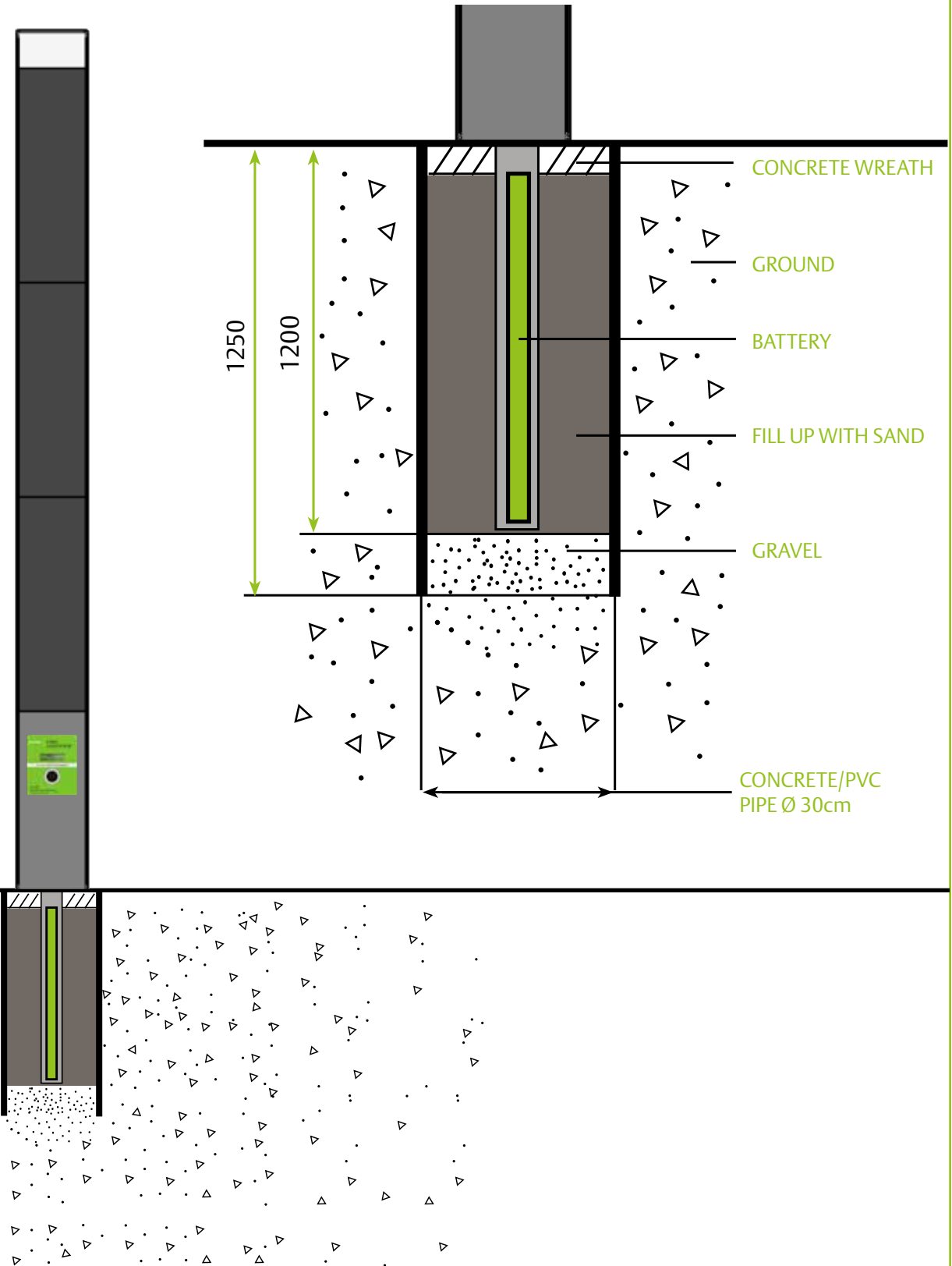
Dimensions



Option for assembly



PIPE FOUNDATION



REFERENCES

Energy tower
Illumination billboard / DE



Energy tower
energy source / AT

luna
Company area / DE



REFERENCES



merkur
residential area / DE

protos
Park / PL



merkur
Adliya district / BHR