

PLAIN

Use

PLAIN is a robust, modular solar lamp. It comprises a module holder, LED lamp, battery and control unit as well as an optional pole.

The top quality components are calibrated optimally, guaranteeing the best illumination.

The impressive design's stylish and linear shapes are complimented by its compact dimensions, minimising packaging and transport efforts.

The structure of the lamp makes it possible to use a diverse range of standard poles.

The PLAIN solar lamps were developed for locations where

- there is no electricity supply.
- there is a probability of consecutive low irradiation days.

Function

During the day, the PLAIN solar lamp saves the solar energy as electric energy in the batteries. The electrical energy obtained in this way is available during the night to operate the LEDs.

Since every location experiences periods with low solar irradiation, the lamp's program settings (see Energy and time management) has the option to divide the available energy.

Options

We look forward to answering your project-related queries.



PLAIN 130

Technical Data



	PLAIN 80	PLAIN 130	PLAIN 160	PLAIN 260
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Photovoltaic				
Module	SW 80 poly RNA	SW 130 poly RNA	2x SW 80 poly RNA	2x SW 130 poly RNA
Maximum output	80Wp	130Wp	160Wp	260Wp
Dimensions	958/680/34	1508/680/34	958/1361/34	1508/1361/34
Weight	7.6kg	11.8kg	15.2kg	23.6kg

Battery holder				
Battery type	Lead gel	Lead gel	Lead gel	Lead gel
Voltage	12V	12V	12V	12V
Capacity	46Ah	92Ah	138Ah	184Ah
Weight	15.5kg	31kg	46.5kg	62kg
Temperature range *	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C
Dimensions	Height 495mm ø410mm	Height 495mm ø410mm	Height 495mm ø410mm	Height 495mm ø410mm

*according to EUROBAT

Lamp				
LED max. output	8x 2.25W	8x 2.25W	8x 2.25W	16x 2.25W
LED max. light flux **	1800lm	1800lm	1800lm	3600lm
Typ. LED light flux	620-800lm	900-1100lm	1200-1350lm	2200-2600lm
Autonomous time with full battery max.	50h	76h	87h	58h
Colour temperature	approx. 5,300K	approx. 5,300K	approx. 5,300K	approx. 5,300K
Dimensions lamp crown	643/110/110	643/110/110	643/110/110	1123/110/110
Weight	6kg	6kg	6kg	11kg
LED life	> 50,000h	> 50,000h	> 50,000h	> 50,000h
Protection type	IP65	IP65	IP65	IP65
Miscellaneous	no UV, IR radiation insect-neutral	no UV, IR radiation insect-neutral	no UV, IR radiation insect-neutral	no UV, IR radiation insect-neutral

**details for 100lm/W

Dimensions -- Lamps with recommended poles				
Total height from GL**	5,500mm	7,400mm	8,300mm	9,300mm
Height of light core	4,500mm	6,000mm	7,000mm	8,000mm
Long pole mounted in the ground	500mm	800mm	800mm	800mm
Pole joint head dimension	60mm	76mm	76mm	76mm

*** at a 40 degree angle
GL: ground level

Warranties	
Mechanical components	2 years warranty
Photovoltaic modules*** (manufacturer's warranty)	2 years with 100% warranty 5 years warranty at 90% minimum output 10 years warranty at 80% minimum output
Battery holder including battery and control unit	2 years warranty
Light component	2 years warranty

***(the warranty period begins from the date of manufacture)

Maintenance schedules	
Mechanical components	Annual visual inspection
Photovoltaic modules	maintenance-free (clean as needed)
Battery	maintenance-free
Light component	maintenance-free (clean as needed)

(subject to technical changes)

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Shipping				
Upper component plus battery box	1 Europallet pallet 800mmx1200mm Height approx. 800mm 50kg	1 special pallet, large 1000mmx2000mm Height approx. 800mm 70kg	1 Europallet pallet 800mmx1200mm Height approx. 800mm 90kg	1 special pallet, large 1000mmx2000mm Height approx. 800mm 110kg
Pole	Length 5,100mm 30kg	6,900mm 50kg	Length 7,900mm 65kg	Length 8,900mm 78kg

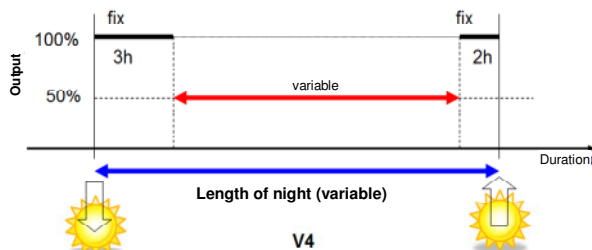
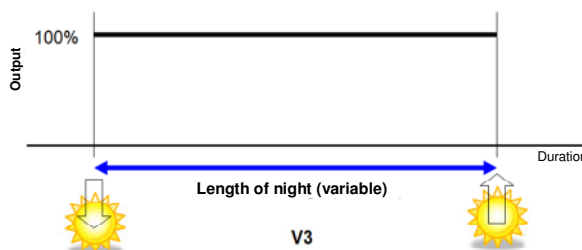
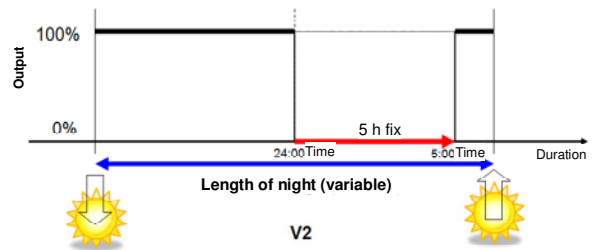
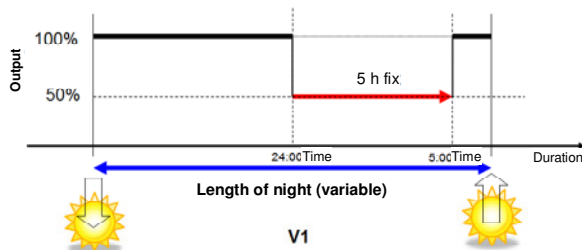
Energy and time management:

A solar lamp can only save a specific amount of energy during the day. Most installation locations experience periods in which the duration and intensity of the solar irradiation is not adequate to save enough energy to light the lamp with 100% output for the entire night.

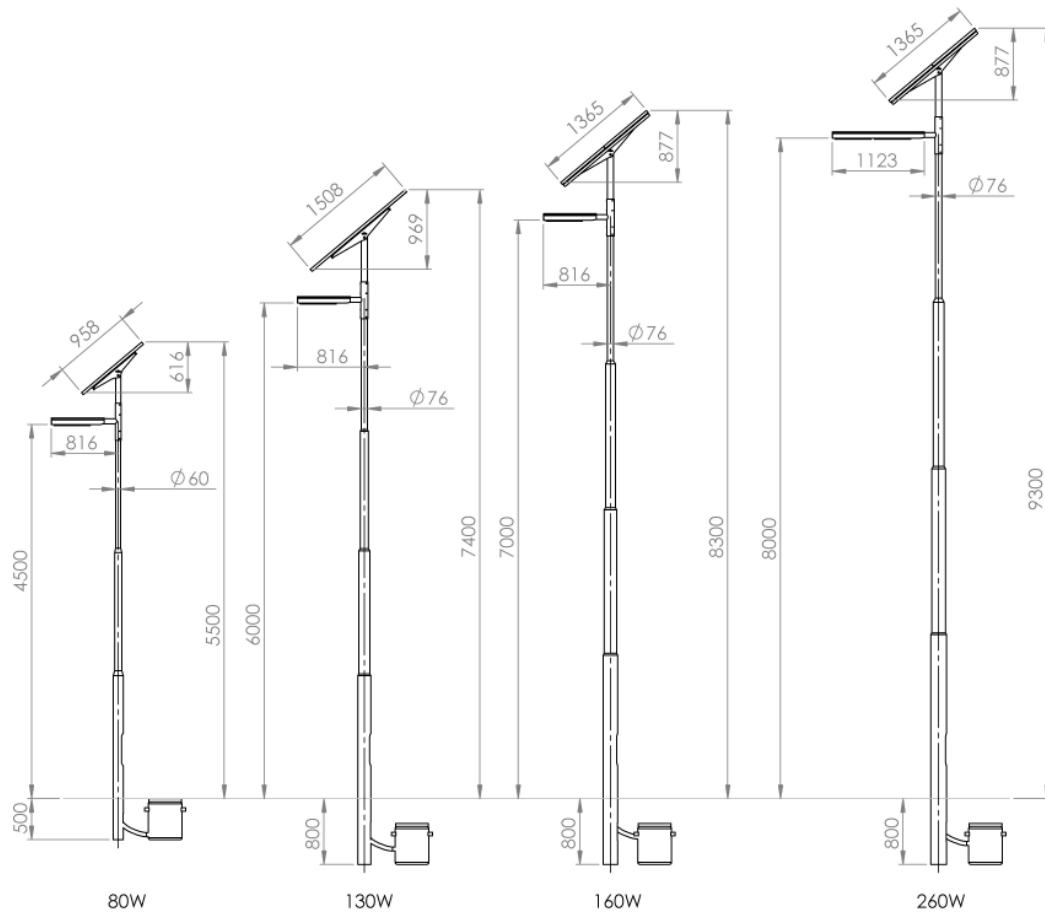
To counter this challenge, PLAIN has different program settings (see Table) that make it possible to save the energy during specific night hours.

Power-down due to insufficient solar irradiation cannot be ruled out in any of the solar lamps!

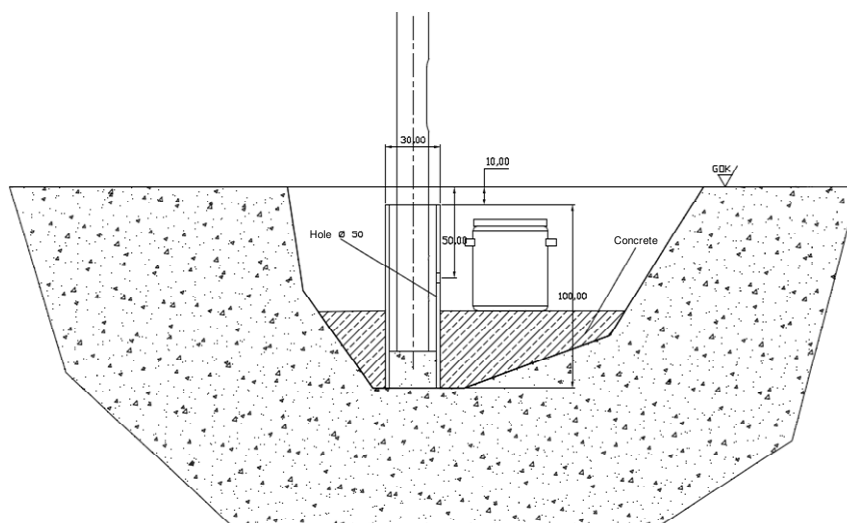
Models	Function	Time / Output
V1	Dimming at midnight	The lamp will be dimmed from 100% to 50% between 12.00 midnight and 5.00 am.
V2	Power-down at midnight	The lamp will be switched off 100% to 0% between 12.00 midnight and 5.00 am.
V3	Dawn to dusk	The lamp illuminates in full capacity the entire night
V4	Dimming at sunrise or sunset	Dimmed 3 hours after sunset (100%), 2 hours before sunrise (100%), and 50% between these times



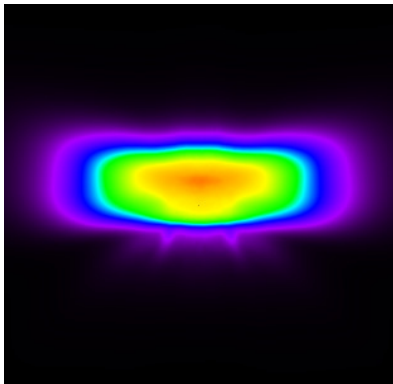
Dimensions:



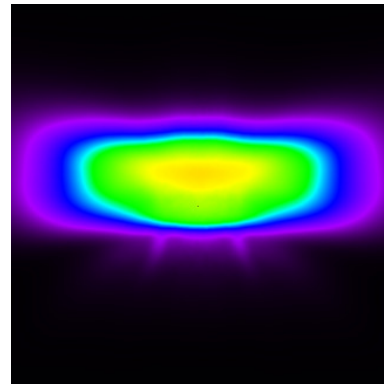
Pipe foundation diagram



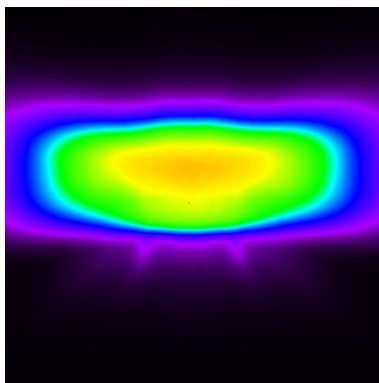
Photometric data:



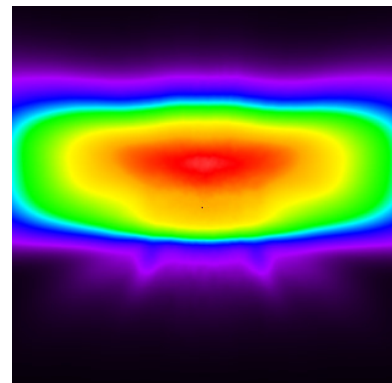
PLAIN 80 LPH 4.5m



PLAIN 130 6.0m

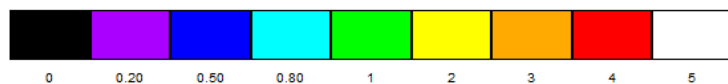


PLAIN 160 7.0m



PLAIN 260 8.0m

Evaluation field (black) 50mx50m



0 0.20 0.50 0.80 1 2 3 4 5 lx

