18144 - Datasheet Independent Photon M

The product "Independent Photon M" consists of

- ICAO Low-intensity, Type A obstacle light "Independent Photon M, mounted on holder with connection cable"
- DC supply battery box
- Battery charger with a connection cable for the battery box

For illustration only

Key features

- LIOL Type A obstruction light for temporary or mobile installations
- Autonomous operation with external battery box
- Automatic switching between day and night mode by brightness sensor
- Suitable for outdoor use

Performance characteristics

- Effective Intensity:
  - Day : off
  - Night : 10 cd red, steady
- Horizontal angle of radiation: >360°
- Vertical beam spread: >12°

Operation mode switching

- Night mode via brightness sensors if illuminance < 50lx

Technical specifications

General

Item number	18144
Conformity	CE, RoHs

Electrical characteristics

Charging time (with supplied 8A charger)	approx. 2 h
Operating time	~ 13 days *
Overvoltage protection	Class III according to IEC 61400-24

NOTICE

* Exemplary for a lighting time of 15 hours per day and a temperature of 25°C. The applicable operation time depends on the temperature, the lighting time and the state of the battery.

Environmental Specification

Operating temperature	-20 to +50 °C (-4 to 122 °F)
Storage temperature	-20 to +60 °C (-4 to 140 °F)
Relative humidity	0 to 100%
Operating altitude	0 m to 2000 m (0 to 6560 ft) AMSL

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Photon obstacle light with holder set

Technical specifications

For illustration only

General

Illuminat	1 red LED
Conformity	CE, RoHs

Power consumption and peak current (typical)

Operating mode	P_{avg} [W]	I_{peak} [mA]
Low-Intensity, Type A, red	1.1	100
Idle	0.3	10

Electrical characteristics

Rated voltage	24 V DC
Rated current	50 mA
Overvoltage protection	Class III according to IEC 61400-24

Physical characteristics

Dimensions (H×W×D)	227 mm × 66 mm × 68 mm
Weight	approx. 1.1 kg
IP protection	IP 68
Material	stainless steel 1.4404 (X2CrNiMo17-12-2)
Mounting	C - holder with magnet

Light connection cable

Side A pinout

Side A connected to "Photon mounted on holder" obstacle light.

Pin	Signal	Function
1	N/A	Reserved
2	+ 24 V	Power supply
3	N/A	Reserved
4	GND	Power supply
5	N/A	Not connected

Side B pinout

Side B connected to "Battery box" DC Supply (-X4).

Pin	Signal	Function
1	N/A	Reserved
2	+ 24 V	Power supply
3	N/A	Reserved
4	GND	Power supply
5	N/A	Not connected

Cable description

Cable type	4 x 0.34 mm
Cable length	5 m
Side A	M12 cable connector, plug insert with 5-pole female
Side B	M12 cable connector, plug insert with 5-pole male

Battery box

Technical specifications

For illustration only

General

Connectors for	• Photon • Charger with connection cable for battery box
Conformity	CE, RoHs

Battery

Name	LiFePo 10Ah
Number of installed batteries	1
Type of installed batteries	Lithium Ion
Voltage battery	25.6 V
Rated capacity (C20)	10 Ah

Electrical characteristics

Rated voltage	25.6 V DC
Max. charge current	8 A
Output voltage	20 V - 28.8 V
Output power	max. 5 W
Energy storage	256 Wh (at 25 °C)**

NOTICE

**The available capacity of the battery depends on the temperature. Low temperatures may reduce the available capacity dramatically! The ideal temperature is between 20 °C and 25 °C.

Physical characteristics

Dimensions (H×W×D)	**with holding plate**	131 mm × 250 mm × 372 mm
	without holding plate	122 mm x 250 mm x 255 mm
Weight	approx. 6 kg	
IP protection	IP 66	
Material	Polyester SMC 0190	

Charger with connection cable for battery box

Technical specifications

For illustration only

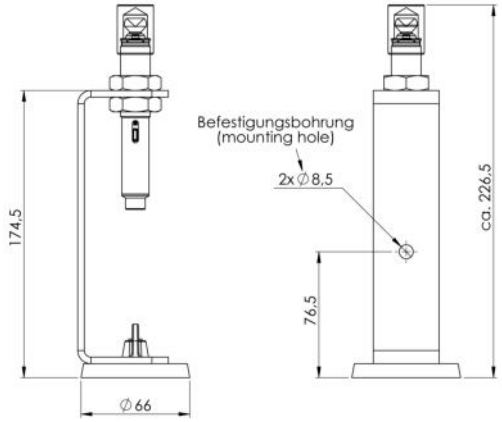
General

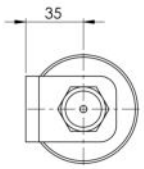
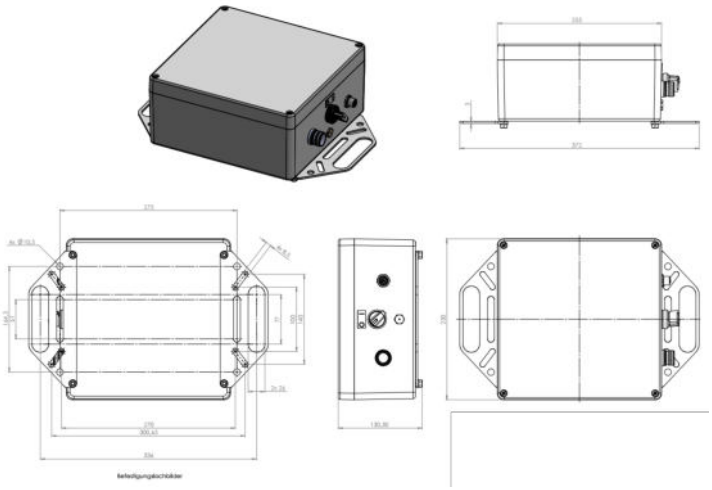
Connectors for	• Battery box • Mains
Conformity	CE, RoHs

Electrical characteristics

Input voltage	230 V AC
Charge current	8 A

Drawings





Photon obstacle light with holder set