

# SOLAR POWERED OBSTRUCTION LIGHT

TYPE: SPOL 6x32 + 2000 BEL

FAA L-810 / ICAO LOW INTENSITY TYPE B 32CD

ICAO MEDIUM INTENSITY TYPE B 2000CD, FAA L-864



Solar Powered Obstruction Light System (SPOL) fully self-contained and reliable air traffic warning light for telecom towers, bridges, cranes, power lines etc. The light is designed by using ultra bright LED combined with high precision lens which are powered by a high efficient solar system. The low weight system is very fast and easy to install. These optimized components will provide a very long lifetime without regular maintenance. The system production is ISO9001:2000 certified and registered by Lloyd's.

## Key features

- No regular lamp replacement due to high intensity LED technology
- Low investment and OPEX costs
- Fast and simple installation
- Low weight
- Low wind load
- No grid power supply needed
- Long lifetime

# TECHNICAL DETAILS

## Obstacle Light

### Obstacle Light

Quantity	6pcs 32cd and 1pcs 2000cd obstacle lights
Light source	Ultra bright led, stabilized light output
Light focusing	By high precision lens
Cover	Glass
Intensity	>32,5cd(meets FAA L-810 and ICAO low-intensity, Type B Fixed Obstacle Light) and >2000cd (meets FAA L-864 and ICAO medium intensity Type B flashing Obstacle Light)
Light color	Aviation red
Light pattern	Steady burning 32cd and flashing 20fpm 2000cd
Light activation	Automatically activated during night time
LED lifetime	>100.000 hours of operation
RF emissions	No RF-radiations
Horizon. output	360°
Vertical output	15° (32cd) 3° (2000cd)
Encapsulation	IP65 (32cd) and IP67 (2000cd)
Operating temp.	-55°C...+55°C
Input voltage	21-28 Vdc
Frame	Anodized marine grade aluminum in black color
Wind load	up to 200km/h or less than 40 N
Terminal box	1,5-6mm <sup>2</sup> wires
Dimensions	1.1kg (32cd) 10kg (2000cd) height300mm, diameter 200mm
Lamp cable	50m UV-protected copper cable with screen conductor (extended cables can be provided on request)
Warranty	5 years limited



2000 cd  
led light

32 cd led light

## Power Cabinet

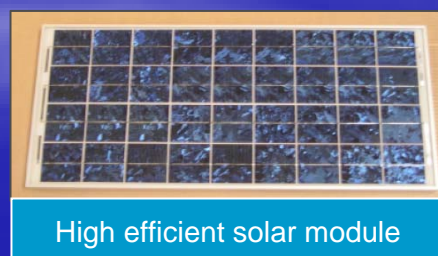
Color	White
Cabinet material	Stainless steel AISI304, powder painted in white color
Mounting set	For 75mm pole mast, stainless steel fittings
Encapsulation	IP44 (without ventilation IP65)
Size	804mm x 406mm x 325mm
Weight	app. 95kg including 80kg battery bank
Battery frame	2pcs sealed batteries
Warranty	5 years limited



Power cabinet

## Solar Module

Rated power	2pcs 65Wp
Rated current	3,8A Imp
Rated voltage	17,1 Vmp
Module effic.	13,0%
Cell efficiency	14,8%
Top cover	Glass, sun grade 3mm
Rear cover	Tedlar-Polyester-Tedlar film
Encapsulant	EVA/GFmat/TPT
Frame	Anodized aluminum
NOCT	45 °C
Size	1000mm x 500mm x 34mm
Weight	6,5kg
Diodes	2pcs factory fitted bypass diodes
Junction box	1pcs, IP65
Cable	UV-protected copper cable 10m
Design life	>30 years
Warranty	25 years limited
Standards	Manufactured as per IEC61215



High efficient solar module

## Solar module structure

Material	Stainless steel AISI304, powder painted
Color	Black frame with white pole mast fitting
Tilt angle	Adjustable 15 ° - 90 °
Mast fitting	for 75mm pole mast
Weight	3,6kg



Adjustable stainless steel structure

## System controller

Type	Naps Mmini Pro
Nominal voltage	12V or 24V
Max. current	10A
Charging type	Solid state
Temp. compens.	-30mV/ °C
Load circuits	2 x 7A
LVD	11,3V / 11,8V or 22,6V / 23,6V
LVD delay	1 minute
Load overvolt.	15,7V or 31,V disconnected
Load reconnect	12,9V or 25,8V
Consumption	<4mA
Display LEDs	PV current, LVD status
Circuit board	Conformal coated
Operating temp.	-20°C...+55°C
Weight	0,2kg



Professional system controller

## Alarm Controller

Type	CSW-24-16-F
Nominal voltage	24-28Vdc
Two pole cont.	Normally open (NO) and Normally closed (NC)
Switch voltage	max 110Vdc
Switch current	max 1A
Switch power	max 30W
Power consum,	<25mA
Light activation	200lux
Indicators	Over-current, under-current, Output, Selftest
Operating temp.	-40°C...+55°C



Alarm controller (optional)

## Battery Bank

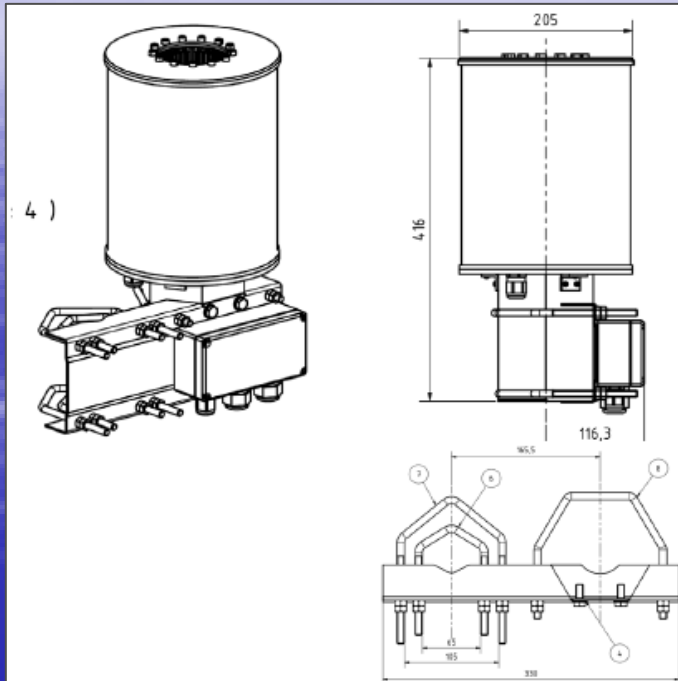
Battery	VRLA, lead acid sealed
Design lifetime	up to 10 years @ 20°C (high ambient temp. may affect overall lifetime)
Autonomy	>170 hours

## Warranty

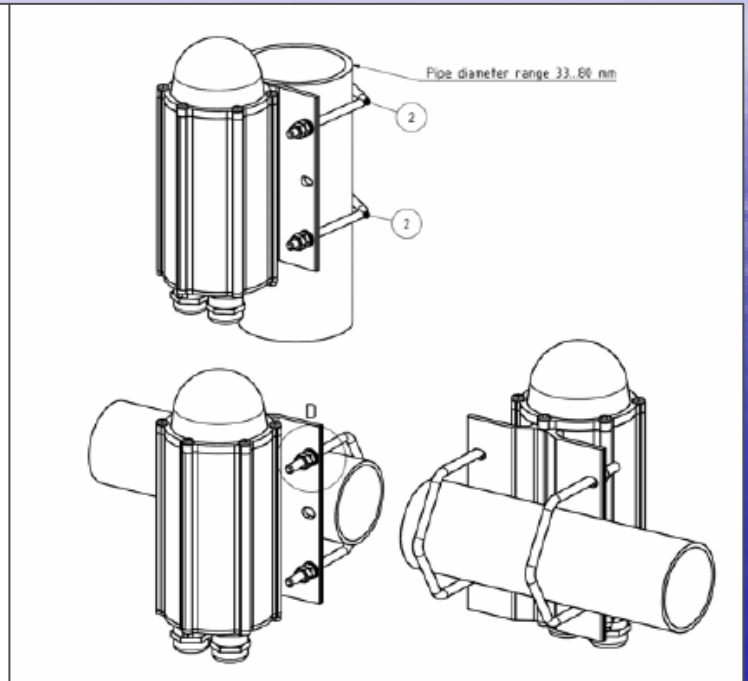
Solar module	25 years limited
Battery	2 years limited
System	5 years limited



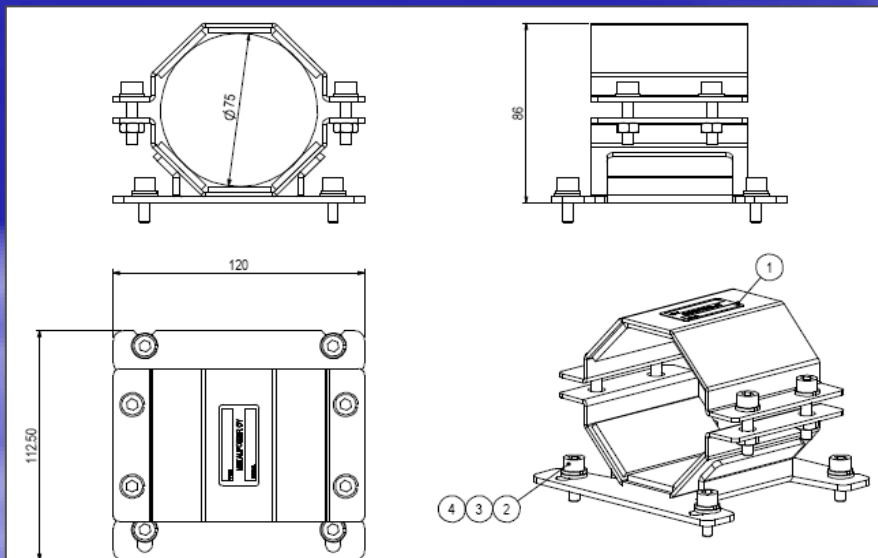
# MOUNTING FITTINGS



Lamp fitting set for 2000cd @ 35-100mm pole



Lamp fitting for 32cd @ 33-80mm V or H pole



Solar module and power cabinet installation set for 75mm pole