# PL10S/PL32S Series Solar Powered Low Intensity Single Obstruction Light





#### **■ COMPLIANCE**

ICAO low intensity, Annex 14, Volume 1

## APPLICATIONS

- Telecommunication Tower
- TV/Radio Tower
- Transmission Tower
- · High-rise building
- Industrial Chimney & Cooling Tower
- Tower Crane
- Bridge
- Wind turbine
- Airfield & helipad
- Storage tank & Water tower
- Oil & Gas offshore platform

#### OVERVIEW

PL10S/PL32S series is a self-contained LED low intensity solar obstruction light.

The compact solar aviation light comes with 1.8W solar panel and 3.6V/8AH NiMH battery. The solar panel on top of the light absorbs sunlight and charges battery at day. NiMH battery inside provides a reliable power source to the light at night.

UV-stabilized polycarbonate lens is the photometric part of amplifying light intensity and distributing light beams. Robust aluminum body with powder coating provides excellent protection against harsh environments.

With built-in photocell, PL10S/PL32S solar light automatically illuminates at night. Incorporated intelligent programs, this solar light is capable of working up to 35 days during rainy and cloudy days.

#### **FEATURES**

- 8 pcs of ultra-bright Philips LEDs, reliable light source ensures long lifespan
- Self-contained solar panel and battery system
- Integrated MPPT (Maximized Power Point Tracking) for maximizing sunlight collection
- Integrated SBM (Smart Battery Management) for saving energy to extend autonomy
- Fresnel optical lens provides excellent light distribution
- Bird spike against birds landing and nesting
- High-grade NiMH battery provides long lifetime
- Autonomy up to 35 days once fully charged during insufficient sunlight days
- Protective vent for expelling battery gas and reducing condensation
- Built-in photocell for automatically turning on and off from dusk to dawn
- Automatically off if continue working 18 hours
- IP67 ON-OFF switch for protecting the battery from overdischarging
- Stainless steel safety rope protects light head from fall-off during maintenance
- GE polycarbonate dome, UV-stabilized
- Aluminum base with powder painted, corrosion-resistant
- IP67 waterproof protection, silicon gasket enhanced
- Excellent shock and vibration resistant

## **■ SPECIFICATIONS**

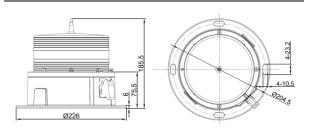
	Item	PL10S	PL32S
LIGHT OUTPUT	Effective Intensity	>10cd	>32cd
	Vertical beam	>10°	
	Horizontal Spread	360°	
	Light Source	Philips LEDs	
	LED Color	Red (for obstruction). White, yellow, green and blue are available for other applications	
	LED Lifespan	100,000 Hours	
OPERATION	Autonomy (Note1)	35 days	35 days
	Suitable areas (Note2)	PSH≥3	PSH ≥ 3
	ON&OFF Level	70/100Lux	
	Flash Pattern	20-60FPM (40FPM as default)	
POWER SUPPLY	Solar Panel Type	Solar Module, Mono-Crystalline Silicon	
	Solar Panel Efficiency	15%	
	Solar Panel Power	1.8W	
	Battery type	NiMH	
	Battery Capacity	1*3.6V/8AH NiMH battery pack	2 * 3.6V/8AH NiMH battery packs
	Battery Replaceability	Yes, replaceable	
MECHANICAL STRUCTURE	Lens	Polycarbonate, UV Stabilized	
	Body	Aviation yellow powder-coated die-casting Aluminum	
	Mounting	Four 10.5*23.2mm slot holes on bottom 204.5mm PCD	
	Net Weight	3.5KG	4.5KG
	Dimension (W*H)	226mm * 185.5mm	
	Protection	IP67	
	Operation Temperature	-40°C~+70°C	
	Operation Humidity	0-95% RH non-condensing	
	Wind resistance	Max.240kph	
OTHERS	Optional	•GPS •Zigbee Wireless Monitoring	
	Warranty	•5 years for light •2 years for battery •10 years for PV	

Notes: 1) The days of autonomy indicated in the specs table is once fully charges, how many days the solar light can run during cloudy/rainy days (12 working hours/day), without optional functions.

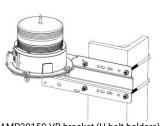
## ORDERING CODE

Main P/N	GPS	Zigbee Wireless Monitoring (Note)
PL10S	[Blank] (without GPS)	[Blank] (without Zigbee module)
PL32S	GPS (with GPS)	<b>ZB</b> (with Zigbee module)

## **DIMENSIONS**

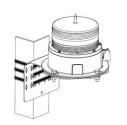


## MOUNTING U-bolt mounting



AMP30150-VB bracket (U-bolt holders) for dia.30-150mm angular/tubular structures

#### • Cable-tie mounting



AMP30150-CT bracket (Cable tie holders) for dia.30-150mm angular/tubular structures

<sup>2)</sup> PSH is the abbreviation of Peak Sun Hours which reflects solar radiation. 1 Peak Sun Hour = 1000 W/m2 of sunlight. The PSH given in the table is a yearly average value. The more PSH value is, The more solar energy potential is. As PSH value varies in different month, please consult REDDOT to select the safest solar obstruction light.

Note: 1) CTRW wireless monitoring box is needed to receive signals from solar lights with Zigbee modules.

E.g.: PL10S, solar powered low intensity single obstruction light, red flashing>10cd, with 1.8W solar panel and 3.6V/8Ah NiMH battery