PL10D/PL32D Series Solar Powered Low Intensity Double Obstruction Light

OVERVIEW

PL10D-PL32D series solar double obstruction light consists of two units of PL10S-PL32S solar single lights. Thanks to the embedded “Master-Slave” program, the solar double aviation lighting system can synchronize flashing two lamps.

Similar to PL10S-PL32S, each single solar light of PL10D-PL32D comes with 1.8W solar panel and 3.6V/8AH NiMH battery. Two single solar lights are connected via a shielded cable and IP68 connector.

With built-in photocell and microcontroller, PL10D-PL32D solar double aviation light system automatically flashes synchronously at night. Incorporated intelligent solar-battery management programs, this solar double lighting system is capable of working up to 35 days during rainy and cloudy days.

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

FEATURES

- Ultra-bright LEDs reliable light source ensures long lifespan
- Two single lamps flash synchronously
- Self-contained solar panel and battery system
- Integrated MPPT (Maximized Power Point Tracking) to maximize 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 continuous working for 18 hours
- IP67 ON-OFF switch for protecting the battery from over-discharging
- 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		PL10D	PL32D
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	Flash sync, 20-60FPM (40FPM as default)	
POWER SUPPLY	Solar Panel Type	Solar Module, Mono-Crystalline Silicon	
	Solar Panel Efficiency	15%	
	Solar Panel Power	2*1.8W	2*1.8W
	Battery type	NiMH	
	Battery Capacity	2*3.6V/8AH NiMH battery pack	2*3.6V/16AH NiMH battery pack
	Battery Replaceability	Yes, replaceable	
MECHANICAL STRUCTURE	Lens	Polycarbonate, UV Stabilized	
	Body	Aviation yellow powder-coated die-casting Aluminum	
	Mounting	Single light: Four 10.5*23.2mm slot holes on bottom 204.5mm PCD	
	Net Weight	7KG	9KG
	Dimension(W*H)	Single light: 226mm * 185.5mm Double light: 586mm * 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.
2) 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.

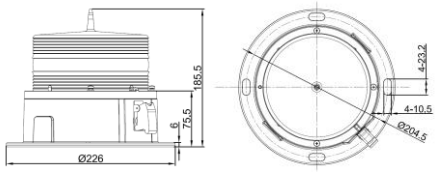
ORDERING CODE

Main P/N	GPS	Zigbee Wireless Monitoring (Note)
PL10D	**[Blank]** (without GPS)	**[Blank]** (without Zigbee module)
PL32D	**GPS** (with GPS)	**ZB** (with Zigbee module)

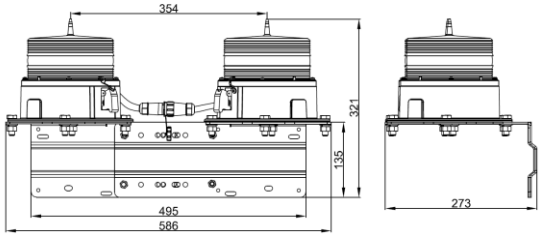
Note: CTRW wireless monitoring box is needed to receive signals from solar lights with Zigbee modules.
E.g.: PL10D, solar powered low intensity double obstruction light, red flashing>10cd, two lamps flash sync, with 1.8W solar panel and 3.6V/8Ah NiMH battery/single light

DIMENSIONS

PL10-PL32S Dimensions

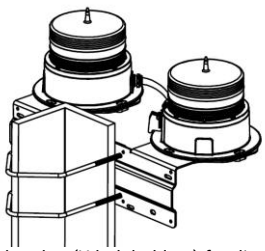


PL10D-PL32D Dimensions (mounted on AMP30150-D bracket)



MOUNTING

- **U-bolt mounting**



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