

# POINT FLASHING BEACON

## PFB LED

### WIND TURBINE OBSTRUCTION LIGHT

### FAA L-864

### ICAO TYPES B & C

Compliances: ETL Verified FAA L-864 to FAA Advisory Circular 150/5345-43J  
 UL Tested & Verified to IP66  
 Verified Compliant to ICAO Annex 14 Medium Intensity Types B & C  
 Verified Compliant to Transport Canada CL864  
 Registered ISO 9001:2015

The PFB LED red medium intensity flashing beacons are for use on aviation obstructions.

- Integral GPS module for flash synchronization.
- Integral flasher module.
- The hardware is 316 (A4) stainless steel.
- Moisture & humidity venting.
- Flashing synchronized by a POC system controller or by the standard internal GPS module.
- Optional: Compatibility with an external Aircraft Detection Lighting System (ALDS).
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".
- Integral FAA photoelectric control.
- Very low weight for tower climbers.
- The LED's are rated for 100,000 hours.
- IP66 tested and listed.

Point Type	Color	Voltage	Options
PFB-37003	R: Red	1: AC 96 to 305V, 50/60 Hz 5: DC 43.2 to 52.8V	See page 2

PFB-37003-R-1  
 MEDIUM INTENSITY RED BEACON



### STANDARD FEATURES

---	NVG Compatibility for night vision
---	Flashing synchronized by a POC system controller or by GPS Note: Standalone beacons automatically flash in sync by GPS Note: Loss of data signal from the POC, beacons automatically sync by GPS
---	Integral FAA photocontrol Note: Active for each standalone beacon.
---	Beacon automatically syncs to POC controller via data cable or to other beacons via internal GPS.
---	Cable loop 3m is included. Includes data lines for use with POC controller and voltage powered alarm line as alternative. Note: The cable loop length is fixed at 3 meters.

### OPTIONS

-Px	Factory Programming: see page 5. Default: GPS & PEC both enabled.
-C	ICAO Type C red steady-burning medium intensity beacon.
-13.25	Mounting feet adapted for traditional incandescent beacon footprint with 13.25-inch bolt circle.
SOL	Solar powered standalone beacon Note: Multiple beacons will flash in sync via GPS.

ALDS	Contact Point Lighting for interface with specific Aircraft Detection Lighting Systems (ALDS).
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PFB-37003 BEACON  
WITH PL11215-V3 WALL BRACKET  
AND PL11545-34 JUNCTION BOX  
INSTALLED TO THE BRACKET



PFB-37003  
FLASHING RED LED BEACON



### SOLAR POWERED RED FLASHING BEACON SYSTEM

#### PFB-37003-R-5-SOL

Solar power "days of autonomy" is the number of days where no power generation is possible due to clouds or rain, despite the fact that you continue to consume energy and we add a 30% safety margin. The battery is designed to withstand deep discharge cycling. The system solar power controller is solid-state, encapsulated and mounted in a listed outdoor NEMA 4X enclosure. The controller does not have a low battery cutoff as the obstruction lights must stay ON despite marginal conditions.

The manufacturer of the lighting must be an FAA certified manufacturing facility. Beware of competitors' quotes by distributors and others who are not FAA approved manufacturers. They use lights that do not accurately state the true power consumption, do not meet international standards for obstruction lighting, and do not allow sufficient safety factors. Thus, competitors dramatically undersize the power system that may cause the light(s) to be out of service for days or months. The solar power system should be specified by the manufacturer of the lighting, not assembled by distributors lacking the proper software and who do not understand the critical backup safety capacity that is required. The power consumption of the light should be measured and third party certified by Intertek Testing Service (ETL).



PFB-37003-R-5-SOL

FLASHING RED LED BEACON  
SHOWN WITH PL11215-V3 BRACKET KIT  
ORDER BRACKET SEPARATELY



- Typically five (5) days autonomy (battery backup)
- Proprietary computer calculations using solar radiation data
- FAA certified lighting manufacturer
- No under sizing as done by distributors of solar products
- Automatic operation based on light levels sensed by the output of the solar array
- Photovoltaic array output to load ratio always exceeds 1-1 year round
- Includes 3m beacon cable loop, solar array & solar controller
- Sealed marine grade deep discharge batteries
- PV panels using high quality crystalline silicone cells

## TYPICAL BEACON PROGRAMMING

All beacons ordered will be factory programmed to accommodate the specific project. See the programming settings below which are set at time of production. The default programming has the GPS and PEC enabled. We will assign option -P3 or -P4, when required, at time of quotation or at time of order. The installer only has to make the wire connections in the field. Distributors and contractors who purchase quantities for stock will be able to program each beacon as required by their customers. A replacement beacon can be ordered with the correct program or may be reprogrammed in the field using a PL11248 handheld device. The PFB-37003 is truly universal.

The PFB-37003 may be deployed as standalone, in a system with flashing sync'd by GPS or in a system operated by a POC system controller. The program set may be changed in the field to change the photometric standard or to change whether the beacon operates standalone or as part of a system of beacons.

Note: In all cases where the beacon is operating from a POC system controller or using a remote PPC photocontrol, failure of the signal from the POC will cause the beacon to activate automatically and generate an alarm while maintaining the beacon's operation.

Internal Global Positioning System (GPS)  
System Controller (POC)

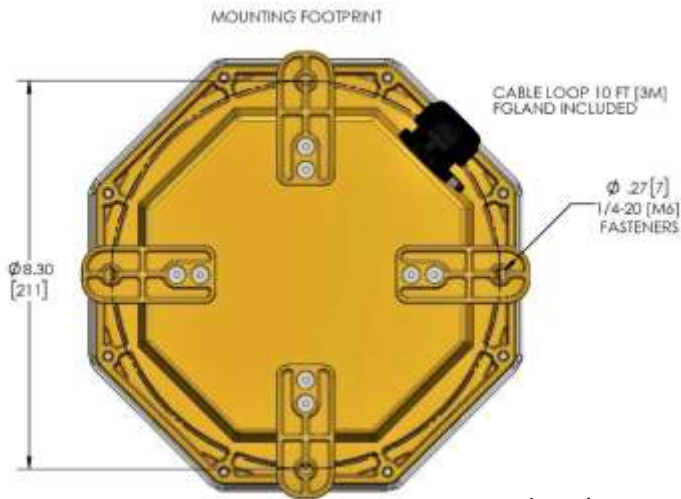
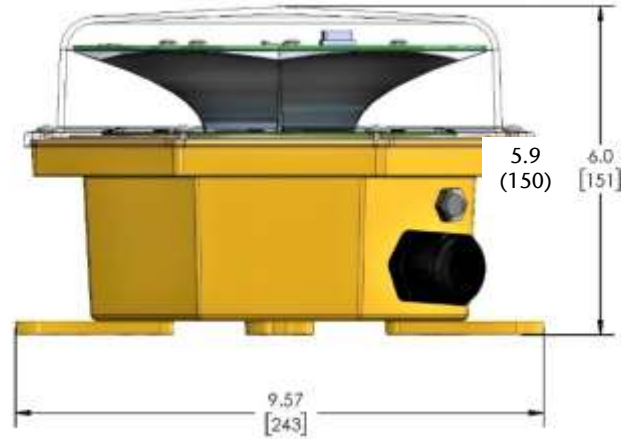
Internal FAA Photoelectric Control (PEC)  
External FAA Photoelectric Control (PPC)

<p>Standard (Flashing): <b>Default Programming</b></p>	<p>Each standalone red beacon operates independently and flashes in sync. See file OL308ADU for a passive PL40195 Alarm Display Unit (ADU). GPS: Enabled PEC: Enabled</p>
<p>Simple System (Flashing): <b>Option -P3</b></p>	<p>Multiple red beacons on one circuit switched by a PPC-40700 photocontrol. Or when using a POC-60301 system controller. Data cable is not required. Beacons sync via GPS. Each beacon has an alarm wire that sends the AC alarm signal back to the POC or other remote alarm relay. GPS: Enabled PEC: Disabled</p>
<p>Simple System (Steady): <b>Option -C or -C-P3</b></p>	<p>Each red beacon operates independently using onboard photocontrol. May use a POC-60301 system controller or PL40195 Alarm Display Unit. Each beacon has an alarm wire that sends the AC alarm signal back to the POC, ADU or other remote alarm relay. GPS: Disabled PEC: Enabled (-C) or Disabled (-C-P3)</p>
<p>Full System (Flashing): <b>Option -P4</b></p>	<p>Uses a POC-68003 or POC-69001 system controller switched by a PPC. Data cable is required; option -P4 is only used with digital control systems. Beacons are sync'd and multiple alarm functions are monitored via the data cable which is one run from the POC and looped to each beacon. Each beacon has a data address. The POC with PPC switches the system power. GPS: Disabled PEC: Disabled</p>

## SERVICE

The beacon may be serviced. However, do not attempt to open the beacon before contacting Point Lighting Corporation for instructions. Do not attempt any testing or procedure not stated in the manual.

Dimensions: Inches  
(mm)



Intensity:	2,000 candelas red night As defined by FAA L-864 Advisory Circular 150/5345-43J
Wattage:	39.0 watts AC peak 6.3 watts AC average 36.4 watts 48V DC peak 5.3 watts 48V DC average
Volt-Amps:	88.0 VA AC peak 17.4 VA AC average
Input Range:	See voltage ranges page 1
Temp Rating:	± 55° C per FAA certification test
LED Life (hours):	100,000
Cable Loop:	Diameter 0.54-inch (13.7mm)
Weight:	6.2 lbs 2.8 kg
Mounting:	4 Holes on 8.3-inch circle for 1/4-20 (M6) screws