



# HELIPORT LIGHTING SOLUTIONS

Point Lighting was the first US manufacturer to offer a complete LED heliport lighting system. Choose from our recommended designs or scroll through our products by application.





# POINT HELIDECK LIGHTS PRL LED v4 HELIDECK SEMIFLUSH LIGHT

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 Tested & Certified to IP66, IP67 & IP69 Ingress Protection  
 FAA AC 150/5390-2C Heliport Design Guide  
 ICAO Annex 14, Volume II  
 Registered ISO 9001:2015  
 UK CAA CAP 437 ed. 8 (2016), Chapter 4 & Appendix C  
 Transport Canada TP14371, AGA 7.17  
 American Bureau of Shipping (ABS) Type Approved Product



The PRL LED Point Rollover Light is used for heliports where an omnidirectional inset semi-flush light is required to provide visibility and circling guidance. Only 2.2 watts and 3.5 VA at 120V.

- The castings are copper-free (< 0.25%) aluminum.
- The lens is glass.
- The hardware is 316 (A4) stainless steel.
- The LED's are rated for 100,000 hours.
- Switchable color option available.
- IP66, IP67 & IP69 tested and listed.
- Standard with the exclusive Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. See below.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	— Voltage	Array	— Color	— Mounting & Options
PRL-97704	1: 120v 2: 220v 3: 12v DC 4: 24v DC 6: 277v	C: Helideck N: NVG *	G: Green Y: Yellow W: White R: Red B: Blue IR: Infrared NVG	VB: Variable Brightness PLS: PLS Base w/ 1-in Entries PLB: PLB Base w/ 1-in Entries CL: Cable Loop & Gland ^ M2x: Metric Thread (M20 or M25) NC: NVG compatibility** JB: Junction Box for cable loop



Note: Array C brightness exceeds ICAO Annex 14 & meets CAP 437  
 \* For NVG tactical use only: PRL-97704-1N-IR-LSM-MT  
 \*\* For use with visible (non-IR) array; adds IR LEDs.  
 Note: For 11-¼ inch bolt circle FAA L-868 bases, order as 97804

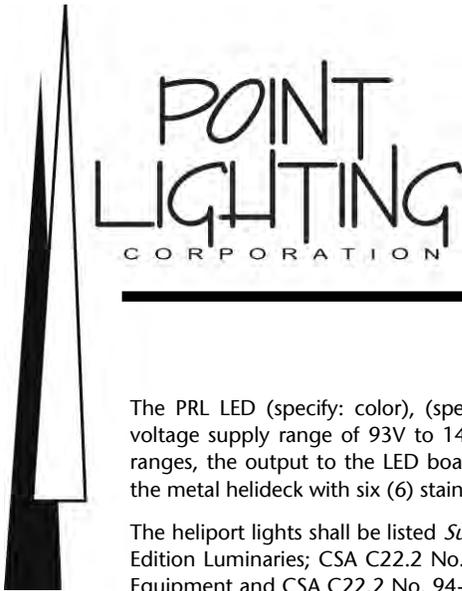
PRL-97704-2C-G-CL  
 WITH MARINE TREATMENT  
 & CABLE LOOP



Our Marine Treatment tolerates marine, high salt content air and other corrosive environments. Standard with green finish as shown. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

*The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.*





# POINT ROLLOVER LIGHTS PRL LED v4 HELIDECK SEMIFLUSH LIGHT

## PRL LED SPECIFICATIONS

The PRL LED (specify: color), (specify: voltage) 50/60 Hz semiflush light shall operate properly within an input voltage supply range of 93V to 144V for 120V units and for 176V to 250V for 220V units. Within the preceding ranges, the output to the LED board shall be a controlled, stabilized constant current. The light shall be affixed to the metal helideck with six (6) stainless steel screws (by others) evenly spaced centered on a 10-¼ inch bolt circle.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-08, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures for use at -40 deg C to +55 deg C and sealed to IP66 and IP67 ingress protection.

The light shall be compliant and tested to UK CAA CAP 437 ed. 8, Chapter 4 and Appendix C including IP66 & IP67.

The light shall be cast aluminum and assembled with all external hardware grade 316 (A4) stainless steel. The lens and lamp housing (optical assembly) shall be sealed mechanically without the use of chemical sealants. Entry to the light housing shall be by means of conduit or watertight cable compression fitting(s). The manufacturer shall include silicone-filled wire nut connectors for use by the installer for watertight connections.

The LED lighting circuits shall be remotely dimmable by means of a heliport controller designed and produced by the lighting manufacturer. Option -VB variable brightness requires installing the PHC-66002 heliport controller. The PHC Heliport Lighting Controller shall incorporate an IEC approved surge suppressor and current limiting circuit breakers on each load output.

The LED light shall have a tested and verified power consumption not to exceed (see chart next page).

The light casting shall be powdercoat painted aviation yellow\* for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I, paragraph 4.5.2. All hardware shall be stainless steel. The outer glass lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow. The glass shall be clear to maximize light transmissivity.

The unit shall be warranted to withstand an ambient temperature range of:  
+130 deg F (+55 deg C) to -67 deg F (-55 deg C).

\* Option -MT: The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.

The color emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours. The LEDs shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LEDs that can be bent out of position shall be unacceptable and cause for rejection. The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion.

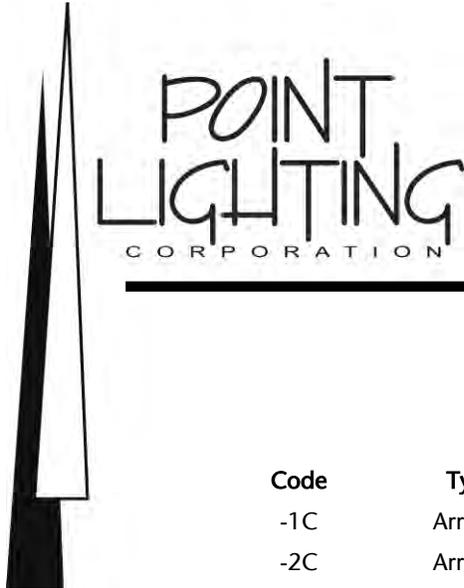
The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). There shall be a clear design element for the dissipation of LED heat to insure the LEDs do not fail prematurely. Note: It is strongly recommended that the circuit also be directly protected by a Point Lighting Corporation surge suppression device such as in a PHC, SPU or PRC unit.

Note: The standard PRL-97704 without -PLB option requires a minimum opening in the helideck of 5.9-inches (150mm) diameter either square per side or round diameter.

Option -CL: The fixture shall be supplied with a watertight cable gland and a 1.5 meter jacketed SO cable.

Option -PLB: The PLB aluminum mounting base shall have two (2) 1-inch NPT conduit hubs located at 0 & 180 degrees near the bottom of the 10-inch (254mm) deep base. Requires a minimum 8.125-inch (207mm) per side square opening or minimum 8.75-inch (222mm) diameter round opening.

The LED aviation inset light shall be POINTSPEC Series PRL-97704 manufactured by Point Lighting Corporation.



# POINT ROLLOVER LIGHTS PRL LED v4 HELIDECK SEMIFLUSH LIGHT

## POWER CONSUMPTION

Code	Type	Voltage	Frequency	Watts*	VA*
-1C	Array C	120 AC	50/60 Hz	2.2	3.5
-2C	Array C	220 AC	50/60 Hz	2.5	5.8
-3C	Array C	12 DC	---	2.1	---
-4C	Array C	24 DC	---	2.5	---

Option -NC Add 1.0 watt and 1.1 VA

\*Power consumption for AC units includes the effect of the unit's power factor which accounts for the difference between watts and volt-amperes. Measurements were made at the nominal AC voltages. The operating range for 120v units is 93 - 144v. The operating range for 220v units is 176 - 250v.

## RECOMMENDED TOOLS

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights. In the event of field service, the PL10839 preset torque wrench kit use with the instruction manual is recommended to assure proper resealing of the fixture.



**PL10860**  
Tool, T-handle Wrench  
For the three socket head screws fixing the PRL fixture to the PLB mounting base.

**PL10839**  
Tool, Preset Torque Wrench Kit  
For the socket head screws fixing the PRL lens clamp ring and for fixing the power supply subassembly.  
Consult the factory and the manual before attempting field repair.



# POINT ROLLOVER LIGHTS PRL LED v4 HELIDECK SEMIFLUSH LIGHT



### Night Vision Goggles (NVG)

Point Lighting Corporation offers options for combining infrared and color LEDs to render our lights visible with and without NVG. Select option -NC.

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights

Instruction Sheet: IS97704

LED Life (hours): 100,000

Projection: 1.63 (41)  
(above deck)

Base Diameter: 8.0 (203)

PLB Depth: 10.0 (254)

PLS Depth: 4.0 (102)

Weight: 17.0 lbs 7.7 kg

Volume: 0.37 ft<sup>3</sup> .013 m<sup>3</sup>

### Replacement Parts

- PL10523G-C Lens, Clear\*
- PL10901-G-C LED Array C, Green
- PL10926-G-C LED Array C, Green with -NC
- PL10530 Gasket, Lens Upper
- PL10531 Gasket, Lens Lower
- PL10532 Gasket, Lamp Housing
- PL10049-4-6 Gasket, Base
- PL10524-125 Screw, Socket Head
- PL10839 Tool, preset torque wrench kit
- PL10860 Tool, T-handle wrench

\* All PRL v4 lights use a clear outer lens.



## POINT LIGHTING CORPORATION

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# POINT HELIDECK LIGHTS PRL-LSM LED v4 LOW SURFACE MOUNT LIGHT

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 Tested & Certified to IP66, IP67 & IP69 Ingress Protection  
 IMO 2009 MODU Code (2010) paragraph 13.5.20  
 FAA AC 150/5390-2B Heliport Design Guide  
 ICAO Annex 14, Volume II  
 Registered ISO 9001:2015  
 UK CAA CAP 437 ed. 8 (2016), Chapter 4 & Appendix C  
 Transport Canada TP14371, AGA 7.17  
 American Bureau of Shipping (ABS) Type Approved Product  
 ABS Green Passport per MEPC179 (59)



The PRL-LSM is an 8-inch diameter surface mounted light *only 146mm high* used for metal helidecks or existing pavement heliports on the FATO perimeter. Only 2.2 watts and 3.5 VA at 120V.

- The casting is copper-free (< 0.25%) aluminum.
- The lens is glass.
- The hardware is 316 (A4) stainless steel.
- The LED's are rated for 100,000 hours.
- Switchable color option available.
- IP66, IP67 & IP69 tested and listed.
- Standard with the exclusive Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. See below.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	Voltage	Array	Color	Mounting & Options
PRL-97004	1: 120v ^ 2: 220v 3: 12v DC 4: 24v DC 6: 277v	C: Helideck N: Infrared only H: ICAO FATO	G: Green Y: Yellow W: White R: Red B: Blue IR: Infrared NVG	VB: Variable Brightness LSM: Low Surface Mount Base MTY: Marine Treatment Yellow CF: Cable Gland (NPT only) M2x: Metric Thread (M20-M25) NC: NVG compatibility** SC: Switchable Color (see pg 2) TB: Terminal Blocks



The C-array exceeds ICAO Annex 14 & meets CAP 437

^ Operates properly using 110v DC and 125v DC.  
 Certification testing was performed at 120v AC.

Visibility range as tested:

Visible Color > 8 nautical miles  
 Option -NC \*\* > 3 nautical miles

\*\* For Night Vision Goggles (NVG)  
 Option -NC adds IR LED at 855 nm  
 Radiant Power: C-array 137 mW/sr

Our Marine Treatment tolerates marine, high salt content air and other corrosive environments. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

*The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.*



### SWITCHABLE COLOR OPTION -SC

Point Lighting offers a unique and proprietary designed option for two color switching within the highly certified PRL package. This is applicable to all mounting forms of the PRL in both safe area and hazardous location Class I, Division 2 and Class I, Zone 2.

In addition to option -SC on the PRL, this system requires use of the color switching PHC-61001 heliport controller with its option -SC1 or -SC2. This permits switching the perimeter lights between two (2) colors.

#### Application Examples

**Example 1:** To mark a helipad as available to land (green) or as closed to landing (red). This could be for an emergency or to designate one pad for landing among two or more.

Each PRL light is switchable from green to red:

PRL-97004-1C-G+R-PLB-SC

The required controller can manually switch the color of all perimeter lights:

PHC-61001-1-SC1 with a rotary switch "GREEN – OFF – RED"

**Example 2:** An offshore marine helideck has alternating yellow and blue perimeter lights, but the owner wants the option to change all the lights to green when the rig is re-tasked.

Each PRL light is switchable from either blue or yellow to green.

PRL-97004-1C-B+G-LSM-SC

PRL-97004-1C-Y+G-LSM-SC

The required controller can manually switch the color of all perimeter lights:

PHC-61001-1-M-SC1 with a rotary switch "BLUE/YELLOW – OFF – GREEN"

**Example 3:** An offshore marine helideck has green perimeter lights and a CAP 437 helideck status light system. Upon manual or automatic activation of the Point PSL status light system, the PRL perimeter lights change to red and flash in sync warning pilots not to land.

Each PRL light is switchable from green to red.

PRL-97004-1C-G+R-LSM-SC

The PSL status light system is ordered with PHC combination helideck lighting controller that includes the integral PSL control unit. In the AUTO position the default color for the lights is green, but upon activation of the PSL the perimeter lights switch to flashing red, but may be manually switched to steady-burning red:

PHC-61001-1-M-SCSL-SL with a rotary switch "GREEN – OFF – AUTO – RED"

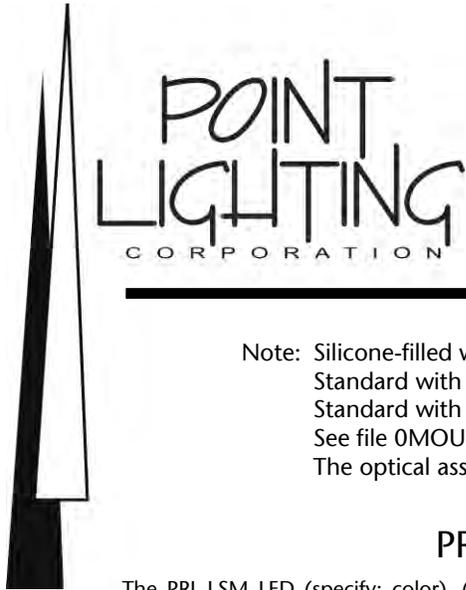
Note: Infrared (IR) cannot be one of the two colors. Both colors must be visible light. Option -NC is available in all cases where the IR LED operates with the visible color.

HELIPORT LIGHTING CONTROLLER  
PHC-61001-1-SC1



MARINE HELIDECK LIGHTING CONTROLLER  
PHC-61001-1-M-SCSL-SL  
Integral PSL Control Unit





# POINT HELIDECK LIGHTS PRL-LSM LED v4 LOW SURFACE MOUNT LIGHT

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Note: Silicone-filled wire connectors are included.  
Standard with our marine treatment finish and internal ground lug.  
Standard with 2 x 1-inch NPT entries at 0 & 180-degrees.  
See file 0MOUNTINGS for details.  
The optical assembly is sealed mechanically without the use of chemical sealants.

## PRL-LSM LED SPECIFICATIONS

The PRL-LSM LED (specify: color), (specify: voltage) 50/60 Hz surface mounted light shall not exceed 150mm in height. The unit shall operate properly within an input voltage supply range of 93V to 144V for 120V units and for 176V to 250V for 220V units. Within the preceding ranges, the output to the LED board shall be a controlled, stabilized constant current.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-08, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures for use at -40 deg C to +55 deg C and sealed to IP66, IP67 and IP69 ingress protection.

Per ICAO Annex 14, Volume II, Figure 5-9, Array H complies with a minimum of 15 candelas in green under 5-degrees vertical and a minimum of 30 candelas at the peak beam range. Array C complies with CAP 437 which is brighter in certain areas up to a maximum of 60 candelas.

The light shall be compliant and tested to UK CAA CAP 437 ed. 8, Chapter 4 and Appendix C including IP66 & IP67.

The light shall be copper-free cast aluminum and assembled with all external hardware grade 316 (A4) stainless steel. The lens and lamp housing (optical assembly) shall be sealed mechanically without the use of chemical sealants. Entry to the light housing shall be by means of conduit or watertight cable compression fitting(s). The manufacturer shall include silicone-filled wire connectors for use by the installer for watertight connections.

The LED lighting circuits shall be remotely dimmable by means of a heliport controller designed and produced by the lighting manufacturer. Option -VB variable brightness requires installing the PHC-66002 heliport controller. The PHC Heliport Lighting Controller shall incorporate an IEC approved surge suppressor and current limiting circuit breakers on each load output.

The LED light shall have a tested and verified power consumption not to exceed (see chart next page). The unit shall be warranted to withstand an ambient temperature range of: +130 deg F (+55 deg C) to -67 deg F (-55 deg C).

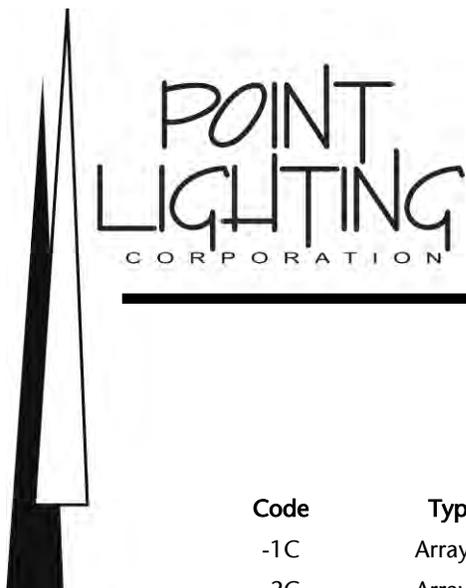
The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured. The outer glass lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow. The glass shall be clear to maximize light transmissivity.

The color emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours. The LEDs shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LEDs that can be bent out of position shall be unacceptable and cause for rejection. The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion.

The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). There shall be a clear design element for the dissipation of LED heat to insure the LEDs do not fail prematurely. Note: It is strongly recommended that the circuit also be directly protected by a Point Lighting Corporation surge suppression device such as in a PHC, SPU or PRC unit.

PRL shall be secured to the LSM mounting base by three (3) socket head stainless steel screws supplied by the manufacturer. A ground lug shall be included as standard.

The LED aviation inset light shall be POINTSPEC Series PRL-97004-LSM manufactured by Point Lighting Corporation.



# POINT HELIDECK LIGHTS PRL-LSM LED v4 LOW SURFACE MOUNT LIGHT

## POWER CONSUMPTION

Code	Type	Voltage	Frequency	Watts*	VA*
-1C	Array C	120 AC	50/60 Hz	2.2	3.5
-2C	Array C	220 AC	50/60 Hz	2.5	5.8
-3C	Array C	12 DC	---	2.1	---
-4C	Array C	24 DC	---	2.5	---

Option -NC Add 1.0 watt and 1.1 VA

\*Power consumption for AC units includes the effect of the unit's power factor which accounts for the difference between watts and volt-amperes. Measurements were made at the nominal AC voltages. The operating range for 120v units is 93 - 144v. The operating range for 220v units is 176 - 250v.

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights

## RECOMMENDED TOOLS

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights. In the event of field service, the PL10839 preset torque wrench kit use with the instruction manual is recommended to assure proper resealing of the fixture.



**PL10860**  
Tool, T-handle Wrench  
For the three socket head screws fixing the PRL optical subassembly to the LSM mounting base.

**PL10839**  
Tool, Preset Torque Wrench Kit  
For the socket head screws fixing the PRL lens clamp ring and for fixing the power supply subassembly.  
Consult the factory and the manual before attempting field repair.



# POINT HELIDECK LIGHTS PRL-LSM LED v4 LOW SURFACE MOUNT LIGHT



### Night Vision Goggles (NVG)

Point Lighting Corporation offers options for combining infra red without NVG. Select option -NC.

Instruction Sheet: IS97004-LSM  
 LED Life (hours): 100,000  
 Housing Dia: 8.0 (203)  
 Height: 5.75 (146)  
 Bolt Circle (4): 9.75 (248)  
 Bolt Hole diam: 0.406-inch  
 10.3 mm  
 Weight: 12.0 lbs 5.5 kg

### Replacement Parts

PL10523G-C Lens, Clear\*  
 PL10901-G-C LED Array C, Green  
 PL10926-G-C LED Array C, Green with -NC  
 PL10530 Gasket, Lens Upper  
 PL10531 Gasket, Lens Lower  
 PL10532 Gasket, Lamp Housing  
 PL10049-4-6 Gasket, Base  
 PL10524-125 Screw, Socket Head  
 PL10839 Tool, preset torque wrench kit  
 PL10860 Tool, T-handle wrench

\* All PRL v4 lights use a clear outer lens.



## POINT LIGHTING CORPORATION

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# POINT ROLLOVER LIGHTS

## PRL LED v4

### HELIPORT INSET LIGHT

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 Tested & Certified to IP66, IP67 & IP69 Ingress Protection  
 FAA AC 150/5390-2C Heliport Design Guide  
 ICAO Annex 14, Volume II  
 Transport Canada Standard 325  
 Registered ISO 9001:2015  
 UK CAA CAP 437 ed. 8 (2016), Chapter 4 & Appendix C  
 American Bureau of Shipping (ABS) Type Approved Product



The PRL LED Point Rollover Light is used for heliports where an omnidirectional inset semi-flush light is required to provide visibility and circling guidance. Only 2.2 watts and 3.5 VA at 120V.

- The castings are copper-free (< 0.25%) aluminum.
- The lens is glass.
- The hardware is 316 (A4) stainless steel.
- The LED's are rated for 100,000 hours.
- Switchable color option available.
- IP66, IP67 & IP69 tested and listed.
- Standard with the exclusive Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. See below.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	Voltage	Array	Color	Mounting & Options
PRL-97004	1: 120v 2: 220v 3: 12v DC 4: 24v DC 6: 277v	C: Heliport N: NVG * V: Vertical^ H: ICAO FATO UFC 3-535-01	G: Green Y: Yellow W: White R: Red B: Blue IR: Infrared*	VB: Variable Brightness PLS: Shallow Base & Gasket NC: NVG compatibility** SR: CAP 437 Seating Ring DH: Drain Hole in Base GR: Ground Lug in Base MTY: Marine Treatment Yellow TW: Taxiway Brightness (blue) SC: Switchable Color (see page 2) TRH: Tamper Resistant Hardware



Note: Array C brightness exceeds ICAO Annex 14 & meets CAP 437

\* For NVG tactical use only: PRL-97004-1N-IR -PLS

^ Inspection uplight normally in white with narrow high intensity vertical beam.

PRL-97004-1C-G-PLS  
WITH PLS RECESSED BASE

#### Visibility Range as Tested:

Visible Color > 8 nautical miles  
 Option -NC \*\* > 3 nautical miles

\*\* For Night Vision Goggles (NVG)  
 Option -NC adds IR LED at 855 nm  
 Radiant Power: C-array 137 mW/sr



Our Marine Treatment tolerates marine, high salt content air and other corrosive environments. Standard with green finish as shown. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

*The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.*

### SWITCHABLE COLOR OPTION -SC

Point Lighting offers a unique and proprietary designed option for two color switching within the highly certified PRL package. This is applicable to all mounting forms of the PRL in both safe area and hazardous location Class I, Division 2 and Class I, Zone 2.

In addition to option -SC on the PRL, this system requires use of the color switching PHC-61001 heliport controller with its option -SC1 or -SC2. This permits switching the perimeter lights between two (2) colors.

#### Application Examples

**Example 1:** To mark a helipad as available to land (green) or as closed to landing (red). This could be for an emergency or to designate one pad for landing among two or more.

Each PRL light is switchable from green to red:

PRL-97004-1C-G+R-PLS-SC

The required controller can manually switch the color of all perimeter lights:

PHC-61001-1-SC1 with a rotary switch "GREEN – OFF – RED"

**Example 2:** An offshore marine helideck has alternating yellow and blue perimeter lights, but the owner wants the option to change all the lights to green when the rig is re-tasked.

Each PRL light is switchable from either blue or yellow to green.

PRL-97004-1C-B+G-LSM-SC

PRL-97004-1C-Y+G-LSM-SC

The required controller can manually switch the color of all perimeter lights:

PHC-61001-1-M-SC1 with a rotary switch "BLUE/YELLOW – OFF – GREEN"

**Example 3:** An offshore marine helideck has green perimeter lights and a CAP 437 helideck status light system. Upon manual or automatic activation of the Point PSL status light system, the PRL perimeter lights change to red and flash in sync warning pilots not to land.

Each PRL light is switchable from green to red.

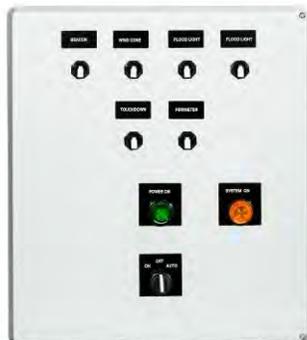
PRL-97004-1C-G+R-LSM-SC

The PSL status light system is ordered with PHC combination helideck lighting controller that includes the integral PSL control unit. In the AUTO position the default color for the lights is green, but upon activation of the PSL the perimeter lights switch to flashing red, but may be manually switched to steady-burning red:

PHC-61001-1-M-SCSL-SL with a rotary switch "GREEN – OFF – AUTO – RED"

Note: Infrared (IR) cannot be one of the two colors. Both colors must be visible light. Option -NC is available in all cases where the IR LED operates with the visible color.

HELIPORT LIGHTING CONTROLLER  
PHC-61001-1-SC1



MARINE HELIDECK LIGHTING CONTROLLER  
PHC-61001-1-M-SCSL-SL  
Integral PSL Control Unit



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Note: Silicone-filled wire connectors are included.  
Standard with our marine treatment finish and internal ground lug in base.  
Base standard with 2 x 1-inch NPT entries at 0 & 180-degrees.  
See file 0MOUNTINGS for details.  
The optical assembly is sealed mechanically without the use of chemical sealants.

### TYPICAL PRL LED SPECIFICATIONS

The PRL LED (specify: color), (specify: voltage) 50/60 Hz aviation inset light shall operate properly within an input voltage supply range of 93V to 144V for 120V units and for 176V to 250V for 220V units. Within the preceding ranges, the output to the LED board shall be a controlled, stabilized constant current.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-08, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures for use at -40 deg C to +55 deg C and sealed to IP66 and IP67 ingress protection.

The light shall be compliant and tested to UK CAA CAP 437 ed. 8, Chapter 4 and Appendix C including IP66 & IP67.

The light shall be cast aluminum and assembled with all external hardware grade 316 (A4) stainless steel. All exterior stainless steel hardware shall be recessed so as not to protrude above the fixture surface. The highest point of the lens shall not exceed 0.75-inch (19-mm) above finished grade. The lens and lamp housing (optical assembly) shall be sealed mechanically without the use of chemical sealants. The fixture shall be capable of being serviced without removing the fixture ring from its mounting base. Flexible epoxy sealant must be used to moisture seal the gap around the fixture and pavement, but will not have to be disturbed for service. The inset light shall be prewired with three conductors (line, neutral, ground). Entry to the light housing shall be by means of a watertight cable compression fitting. The manufacturer shall include silicone-filled wire nut connectors for installer use for watertight connections.

The LED lighting circuits shall be remotely dimmable by means of a heliport controller designed and produced by the lighting manufacturer. Option -VB variable brightness requires installing the PHC-66002 heliport controller. The PHC Heliport Lighting Controller shall incorporate an IEC approved surge suppressor and current limiting circuit breakers on each load output.

The LED light shall have a tested and verified power consumption not to exceed (see chart next page).

The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured. The outer glass lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow. The glass shall be clear to maximize light transmissivity.

The unit shall be warranted to withstand an ambient temperature range of:

+130 deg F (+55 deg C) to -67 deg F (-55 deg C).

The color emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours. The LEDs shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LEDs that can be bent out of position shall be unacceptable and cause for rejection. The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion.

The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). There shall be a clear design element for the dissipation of LED heat to insure the LEDs do not fail prematurely. Note: It is strongly recommended that the circuit also be directly protected by a Point Lighting Corporation surge suppression device such as in a PHC, SPU or PRC unit.

The cast aluminum mounting base shall be PLS-40304 (option -PLS) with two (2) 1-inch NPT hubs located at 0 & 180 degrees near the bottom of the 4-inch deep base. The PRL shall be secured by three (3) socket head stainless steel screws supplied by the manufacturer. There shall be a disposable plywood cover to set the base at the proper depth to recess the light. PL10701-X spacer rings may be required to adjust the height of the light to match grade.

The LED heliport inset light shall be POINTSPEC Series PRL-97004 manufactured by Point Lighting Corporation.

### POWER CONSUMPTION

Code	Type	Voltage	Frequency	Watts*	VA*
-1C	Array C	120 AC	50/60 Hz	2.2	3.5
-2C	Array C	220 AC	50/60 Hz	2.5	5.8
-3C	Array C	12 DC	---	2.1	---
-4C	Array C	24 DC	---	2.5	---

Option -NC Add 1.0 watt and 1.1 VA

\*Power consumption for AC units includes the effect of the unit's power factor which accounts for the difference between watts and volt-amperes. Measurements were made at the nominal AC voltages. The operating range for 120v units is 93 - 144v. The operating range for 220v units is 176 - 250v.

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights.

### RECOMMENDED TOOLS

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights. In the event of field service, the PL10839 preset torque wrench kit use with the instruction manual is recommended to assure proper resealing of the fixture.



**PL10860**  
Tool, T-handle Wrench  
For the three socket head screws fixing the PRL fixture to the PLS mounting base.

**PL10839**  
Tool, Preset Torque Wrench Kit  
For the socket head screws fixing the PRL lens clamp ring and for fixing the power supply subassembly.  
Consult the factory and the manual before attempting field repair.

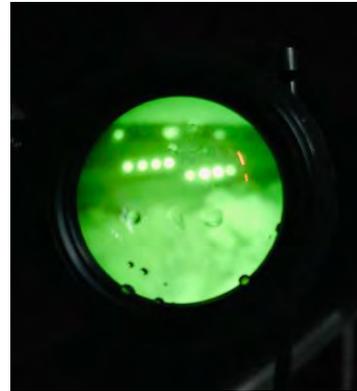
# POINT LIGHTING

## POINT ROLLOVER LIGHTS PRL LED v4 HELIPORT INSET LIGHT

PRL-97004-1C-G-MTY-PLS  
WITH PLS RECESSED BASE, GASKET & GROUND LUG  
WITH OPTIONAL YELLOW MARINE TREATMENT



PRL-97004 WITH OPTION -NC  
VIEWED AT NIGHT THROUGH NVG  
BY A MILITARY PILOT IN TAIWAN



### Use of Night Vision Goggles (NVG)

Normal color emitting LEDs are invisible to NVG. Point Lighting Corporation offers option -NC for combining infrared LEDs at 855 nm and color LEDs to render our lights visible with and without NVG.

Instruction Sheet: IS97004  
LED Life (hours): 100,000  
Projection: 0.7 (18)  
Base Diameter: 8.0 (203)  
PLS Depth: 4.0 (102)  
Weight: 12 lbs 5.5 kg  
Volume: 0.37 ft<sup>3</sup> .013 m<sup>3</sup>

### Replacement Parts

PL10523G-C	Lens, Clear*
PL10901-G-C	LED Array C, Green
PL10926-G-C	LED Array C, Green with -NC
PL10530	Gasket, Lens Upper
PL10531	Gasket, Lens Lower
PL10532	Gasket, Lamp Housing
PL10049-4-6	Gasket, Base
PL10524-125	Screw, Socket Head
PL10701-X	Spacer Ring x/8-inch
PL10655	Tool, option -TRH
PL10839	Tool, preset torque wrench kit
PL10860	Tool, T-handle wrench

\* All PRL v4 lights use a clear outer lens.



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# POINT ELEVATED LIGHTS PEL LED v5 HELIPORT PERIMETER & LEAD-IN LIGHT

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 FAA AC 150/5390-2D Heliport Design Guide  
 ICAO Annex 14, Volume II  
 Registered ISO 9001:2015  
 UK CAA CAP 437, Chapter 4, paragraph 3.1  
 American Bureau of Shipping (ABS) Type Approved Product



The PEL AC or DC voltage powered elevated LED lights mark the FATO perimeter of a heliport and mark the preferred direction of helicopter approach. The FAA and ICAO recommended color is green. The fixture consists of an outer glass lens mounted on a yellow marine treated cast aluminum housing secured by a gasket and permanently sealed. The PEL's upper assembly mounts on an aluminum machined frangible (breakaway) adapter. The electronic power supply is sealed to be watertight in the fixture head assembly. Almost any mounting requirement can be accommodated by POINT LIGHTING CORPORATION. The installed height with baseplate is 9.8-inches (249mm). See file 0MOUNTINGS for mounting details.

## Point Type — Voltage — Array — Color — Height — Mounting & Options

PEL-57005	1: 120v 2: 220v 3: 12v DC 4: 24v DC 6: 277v	C: Heliport N: NVG * H: ICAO FATO	G: Green Y: Yellow (Blank)^ W: White R: Red B: Blue GR: Green-Red IR: Infrared	14	VB: Variable Brightness PLS: Shallow Base & Gasket BP: Baseplate Only GR: Ground Lug in Base MT: Green Marine Treatment NC: NVG compatibility** TW: Taxiway - Reduced Intensity (blue) SOL-C094A: Solar Powered & Wireless Operation DH: Drain Hole in Base
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The PEL v5 C array is 2.2 watts at 120V

Note: Array C brightness exceeds ICAO Annex 14 & meets CAP 437

\* For NVG tactical use only: PEL-57005-1N-IR-PLS-MT

\*\* For use with visible (non-IR) array; adds IR LEDs.



^ If left blank, the height will be 9.8-in

PEL-57005-1C-G-14  
WITH TRADITIONAL FAA  
FRANGIBLE COUPLING



Includes our standard yellow Marine Treatment finish at no additional charge which tolerates marine, high salt content air and other corrosive environments. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

Point Lighting Marine Treatment: *Our paint finish is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.*

PEL-57005-1C-G

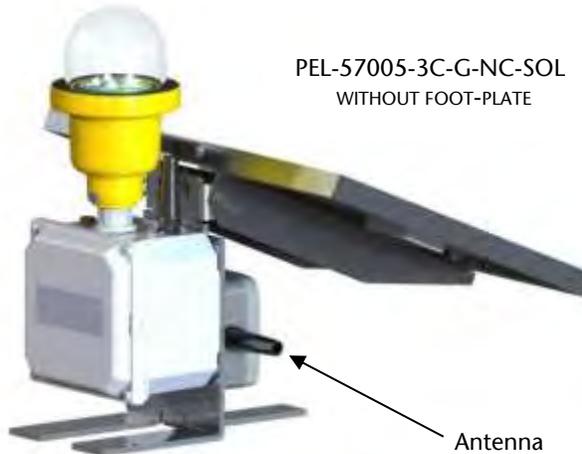


CLEAR LENS BUT GREEN LIGHT PRODUCED  
COLOR CODED LED BOARD

### PEL-57005 SOLAR POWERED PERIMETER & RUNWAY LIGHT

OPERATES ALL NIGHT YEAR ROUND WITH 7 DAYS BATTERY AUTONOMY

OPTIONAL WIRELESS SWITCHING AT UP TO 4,000 METERS



PEL-57005-3C-G-NC-SOL  
WITHOUT FOOT-PLATE

### TYPICAL APPLICATIONS

Operates automatically all night, year round:

- |                                |   |
|--------------------------------|---|
| PEL-57005-3C-(color)-NC-SOL    | Solar powered light for bolting in place                  |
| PEL-57005-3C-(color)-NC-SOL-FP | Solar powered light with foot-plate for stacks or weights |

Optional wireless switching:

- |                                   |  |
|-----------------------------------|--|
| PEL-57005-3C-(color)-NC-SOL-C094  | Solar powered light with key fob wireless operation at site*   |
| PEL-57005-3F-(color)-NC-SOL-C094A | Solar powered light with handheld wireless operation to 4 km*^ |

Includes option -NC: NVG compatibility. For use with visible (non-IR) array; adds an infrared LED.

\* Option -C094A for long range operation up to 4,000 meters. Option -C094 is for on-site local operation only.

Onboard wireless signal receiver & antenna for ON-OFF operation.

Wireless activation with handheld device PL11572-TRANS (-C-094A) or key fob included with -C094.

^ Note: PL11572-TRANS must be ordered separately one per site for any -C094A system.

May be factory set in groups with separate transmitters such as two helipads.



### Visibility Range as Tested:

- |               |                    |
|---------------|--------------------|
| Visible Color | > 8 nautical miles |
| Option -NC^   | > 3 nautical miles |

^ For Night Vision Goggles (NVG)



### PEL LED SPECIFICATIONS

The PEL LED (specify: color), (specify: voltage) 50/60 Hz aviation elevated light shall operate properly within an input voltage supply range of 93V to 144V for nominal 120V units and 176V to 250V for nominal 220V units. Within the preceding ranges, the output to the LED array shall be a controlled, stabilized constant current.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels, UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-08, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures for use at -40 deg C to +55 deg C and sealed to IP66 ingress protection.

The LED lighting circuits shall be remotely dimmable by means of a heliport controller designed and produced by the lighting manufacturer. Option -VB variable brightness requires installing the PHC-66002 heliport controller. The PHC Heliport Lighting Controller shall incorporate an IEC approved surge suppressor and current limiting circuit breakers on each load output.

The photometric performance shall exceed a range defined by ICAO Annex 14, Volume II, Figure 5-9. The LED light shall have a tested and verified power consumption not to exceed:

2.2-watts and 3.5 VA at 120v AC (Array C)  
2.5-watts and 5.8 VA at 220v AC (Array C)

The unit shall have passed the US Military Standard tests: the constant high temperature test to +130 deg F (+55 deg C) and the constant low temperature test to -67 deg F (-55 deg C) conducted in accordance with US MILSTD-810F, Method 501.3, Procedure II; the wind-blown rain test that has been conducted in accordance with US MIL-STD-810F, Method 506.3, Procedure I; and the humidity test shall be in accordance with US MIL-STD-810F, Method 507.3, Procedure I. The complete test regime shall exceed the requirements of NEMA 4X and IP 66. The light head casting shall be Marine Treatment aviation yellow for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted MIL-STD-810F, Method 509.4, Procedure I, paragraph 4.5.2.

The outer glass lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow. The glass shall be clear to maximize light transmissivity. The frangible adapter shall be threaded 1-inch NPT to interface with the PL40301-10T baseplate.

The color emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours.

The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion. The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). There shall be a clear design element for the dissipation of LED heat to ensure the LEDs do not fail prematurely. DC light fixtures shall be reverse polarity protected.

The aluminum mounting base shall be PLS-40304 (option -PLS) with two (2) 1-inch NPT hubs located at 0 & 180 degrees on the sides of the 4-inch deep base. The base shall have an option for 4-way hubs or bottom hubs in place of the standard two side hubs. The PL40301-10T baseplate shall be powdercoat painted to match the light fixture. The baseplate shall be affixed to the base by three (3) stainless steel screws.

The LED aviation elevated light shall be POINTSPEC Series PEL-57005 manufactured by Point Lighting Corporation.

Note: For taller lights, order PEL-57005-1C-G-xx-PLS with traditional frangible coupling and pipe extension.  
Available heights (-xx) in inches are: -14, -18, -24 and -30.

#### **Myth: All LED's have a useful life of 100,000 hours**

The amount of useable light—about 70% of original light output—from some LED's has been shown to be very short depending on the color and manufacturer of the LED. That is why the quality of the LED array and power supply is very important and they should be of the latest technology as used by Point Lighting Corporation.

#### **Myth: LED's do not create heat**

LED's do create heat, but the heat generated is retained within the LED array and needs to be dissipated. Without a proper design, the LED will fail very early in life. The PEL LED array design incorporates an aluminum heat sink to dissipate the heat. Some competitors' lights—by design—cannot handle the heat.



Instruction Sheet: IS57005  
LED Life (hours): 100,000

PEL Height: 9.7 (249)  
Base Diameter: 8.0 (203)  
PLS Depth: 4.0 (102)

Weight: 4.0 lbs 1.8 kg  
Volume: 0.5 ft<sup>3</sup> .014 m<sup>3</sup>

### Replacement Parts & Tools

Note: The PEL optical subassembly is permanently sealed to prevent moisture penetration and it is not serviceable.

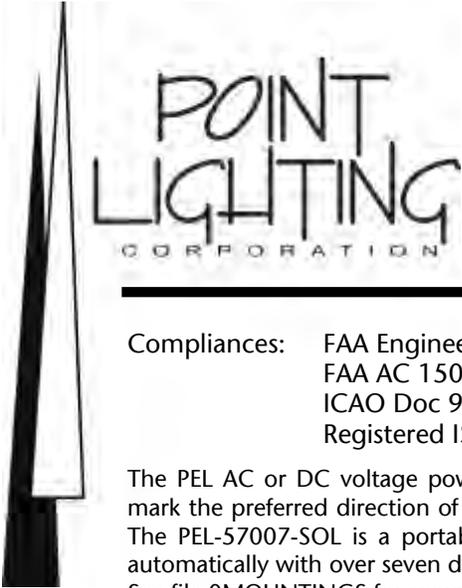
- |             |                          |
|-------------|--------------------------|
| PL10040     | Frangible Coupling (-14) |
| PL11628-1   | Frangible Adapter        |
| PL40301     | Baseplate (-14)          |
| PL40301-10T | Baseplate                |
| PL10049-4   | Gasket, Baseplate        |
| PL10192-75  | Circular Bubble Level    |



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# POINT ECONOMY LIGHTS PEL LED

## HELIPORT PERIMETER & LEAD-IN LIGHT PORTABLE SOLAR POWERED RUNWAY & HELIPORT LIGHT

Compliances: FAA Engineering Briefs 87 Heliports & 105 Vertiports  
 FAA AC 150/5390-2D Heliport Design Guide  
 ICAO Doc 9261, Part II, Fifth Edition, 2021  
 Registered ISO 9001:2015

The PEL AC or DC voltage powered elevated LED lights mark the FATO perimeter of a heliport and mark the preferred direction of helicopter approach. The FAA and ICAO recommended color is green. The PEL-57007-SOL is a portable solar powered runway or heliport light that will operate all night automatically with over seven days battery backup and a wireless switching option. See file 0MOUNTINGS for mounting details.

Point Type	—	Voltage	—	Color	—	Options
PEL-57007		1C: 96-250V AC 5C: 10.8 to 52.8V DC		G: Green Y: Yellow W: White R: Red B: Blue		See Page 2 for typical versions

PEL-57007-1C-G-BP  
 Shown with PL40301-10T Baseplate  
 ONLY 2.0 WATTS



PEL-57007-1C-G-34B  
 Mounts on 3/4-inch conduit



CLEAR LENS BUT GREEN LIGHT PRODUCED

PEL-57007-5C-R-SOL-FP  
 Portable Solar Powered Light – Automatic & All-Night  
 Wireless operation available as option -C094 or -C094A



- Exceeds 30 candelas
- Autonomy is 7.3 days (battery capacity without sun)
- Optional wireless operation via handheld device
- For any location in the world that exceeds 1.2 kWh/m2/day
- Includes carry handle
- Optional foot-plate (-FP) for staking or sandbags
- No switching required; operates automatically all night & turns off in the morning

#### TYPICAL APPLICATIONS

PEL-57007-5C-(color)-SOL	Portable solar powered light for automatic all-night operation
PEL-57007-5C-(color)-SOL-FP	Portable solar powered light with foot-plate for stacks or weights
PEL-57007-5C-(color)-SOL-C094	Portable solar powered light with wireless operation at site*
PEL-57007-5C-(color)-SOL-C094A	Portable solar powered light with wireless operation to 4 km*
PEL-57007-1C-G-PLS	Heliport perimeter light green 120-240v with baseplate & base
PEL-57007-1C-G-34B	Heliport perimeter light green 120-240v mounts on ¾-inch RSC
PEL-57007-1C-G-BP	Heliport perimeter light green 120-240v with baseplate only

\* Option -C094A for long range operation up to 4,000 meters. Option -C094 is for on-site local operation only.

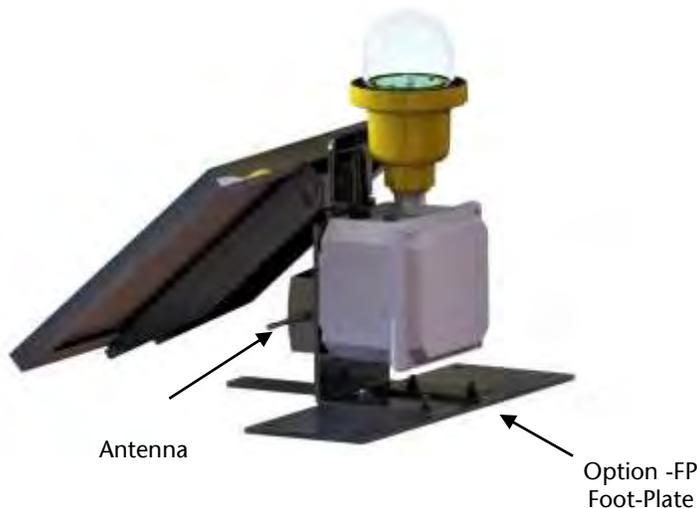
Onboard wireless signal receiver & antenna for ON-OFF operation.

Wireless activation with handheld device PL11572-TRANS (-C-094A) or key fob included with -C094.

^ Note: PL11572-TRANS must be ordered separately one per site for any -C094A system.

May be factory set in groups with separate transmitters such as two helipads.

PEL-57007-5C-G-SOL-C094A-FP  
SOLAR WITH WIRELESS OPERATION  
ORDER ONE PL11572-TRANS PER SITE



PEL-57007-1C-W-14-BP  
WITH BASEPLATE



## POINT LIGHTING CORPORATION

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# POINT HELIPORT LIGHTS

## PHL LED v5

### COMBINATION PERIMETER & FLOODLIGHT

Compliances: ETL Listed per UL50 & UL1598 at -40 deg C to +50 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981  
 FAA AC 150/5390-2B Heliport Design Guide  
 ICAO Annex 14, Volume II  
 Registered ISO 9001:2015  
 Transport Canada TP14371, AGA 7.17



The PHL elevated LED lights mark the perimeter (FATO) of a heliport. The FAA recommended perimeter color is green. The ICAO recommended color is green (C-array) when the FATO and TLOF are the same or white (H-array) when there is a separate green TLOF inner perimeter. The purpose of the PHL's LED floodlight is to provide light "washing" the pad surface to provide better depth perception to the pilot than simply having perimeter lights. It improves conspicuity to the pilot but does not provide uniform, illumination of the pad surface. The floodlight is engineered to be well controlled and reduce glare to the pilot. The overall height is compatible with standard height PEL's to be used together on the same perimeter. The LED floodlight should be separately circuited for control independent of the colored LED perimeter light.

See file 0MOUNTINGS for mounting details

Point Type	Voltage	Array	Color	Floodlight	Mounting & Options
PHL-57005	1: 120v 2: 220v 6: 277v	C: Heliport H: ICAO FATO	G: Green Y: Yellow W: White R: Red B: Blue	53063	SELECT A MOUNTING OPTION ON PAGE 2 VB: Variable Brightness* NC: NVG Compatibility** DH: Drain Hole in Base MT: Marine Treatment Green

\* Dimming option -VB does NOT apply to the floodlight which should on be a separate circuit. Use PHC-66002 with option -BC for floodlight.

Note: Array C brightness exceeds ICAO Annex 14 in green. For ICAO FATO in white, use array H.

\*\* For use with visible (non-IR) array; adds IR LEDs.

The PHL v5 C array does not exceed 2.5 watts & 5.8 VA at 120-220V  
 The PHL floodlight is 32.2 watts & 34.1 VA at 120-220V

Marine Treatment in yellow is standard for protection in marine, high salt content air and other corrosive environments.

Intertek ETL SEMKO Control Number: 3030033

PHL-57005-1C-G-53063-BP-V  
 SHOWN WITH PL40301-T BASEPLATE  
 VISOR IS STANDARD

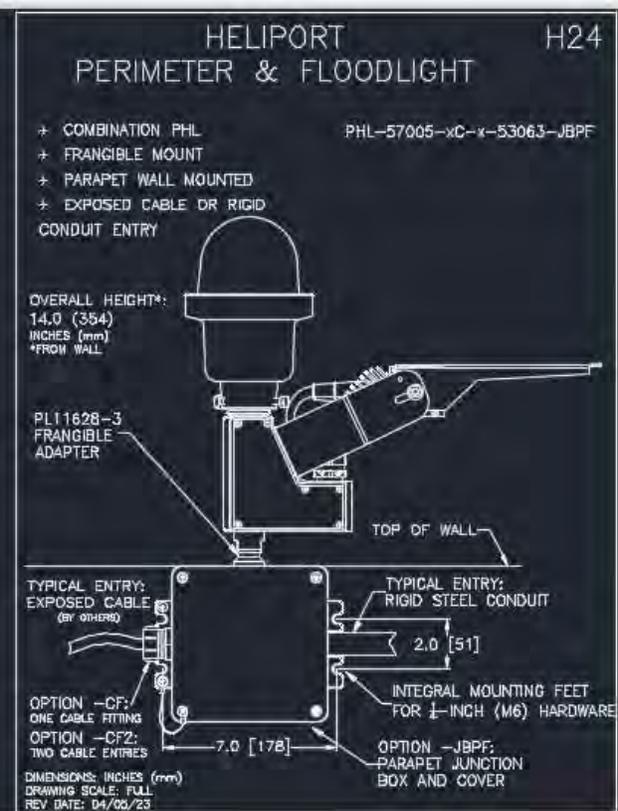
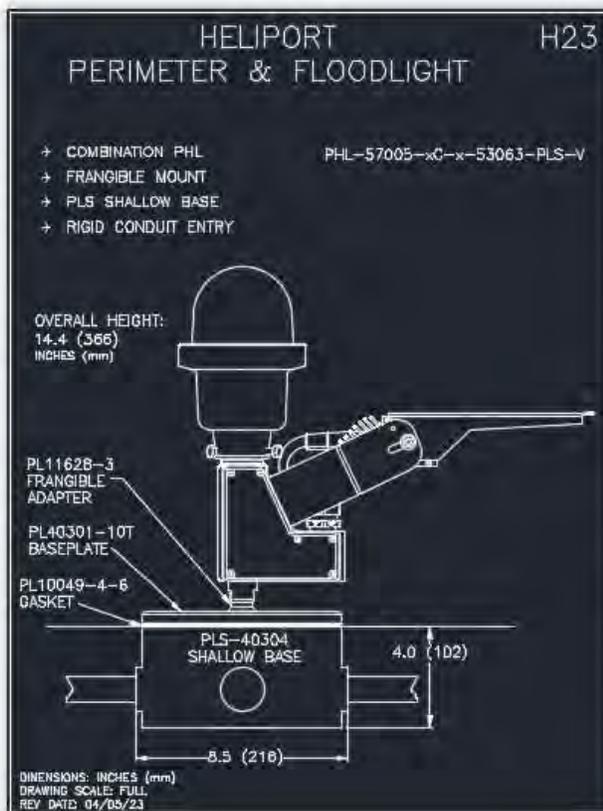
#### FLOODLIGHT DATA

Intensity:	4,725 lumens
Peak:	14,175 candelas
LED rated average life:	100,000 hours
Temperature Range:	-40 to +50 deg C
Frequency:	50/60 Hz
Ingress Rating:	IP66 & IP67



### MOUNTING OPTIONS

JBSF	Junction Box, Surface; Frangible	Detail H22	JBPF	Junction Box, Parapet-Wall; Frangible	Detail H24
PLS	Inpavement Base; Frangible	Detail H23	LSM	Low Surface Base; Frangible	Detail H21
SF	Slipfitter to 2" EMT conduit (60mm)	Detail H25	BP	Baseplate only; Frangible	Detail H08.7
-2P-PLS	FAA 2" Coupling for Extended Height; Frangible Use with 2" EMT (Requires -SF)	Detail H27			



### Replacement Parts & Tools

Instruction Sheet: ISPHL57005  
 LED Life (hours): 100,000  
 Height: 14.4 (366)  
 Width: 21.5 (546)  
 Base Diameter: 8.0 (203)  
 PLB Depth: 10.0 (254)  
 PLS Depth: 4.0 (102)  
 Weight: 4.0 lbs 1.8 kg  
 Volume: 0.5 sq.ft .014 m.sq.

Note: The PEL optical subassembly is permanently sealed. In the event of failure, the fixture must be returned to the factory for evaluation and repair.

PSF-53063-6-T-V Floodlight  
 PL10038 Pipe Extension  
 PL11628-3 Frangible Adapter  
 PL40301-10T Baseplate  
 PL10049-4-6 Gasket, Baseplate



# POINT SURFACE FLOODLIGHT PSF LED HELIPORT LOW PROFILE FLOODLIGHT SAFE AREA & HAZARDOUS AREA

Compliances: ETL Listed to UL 844 (option -EX) & UL 1598  
 ETL Listed to UL 1598A Marine Vessels, IP66 & IP67\*\*  
 ETL Listed to CSA C22.2 No. 250.0:2008 Canada  
 ETL Listed to CSA C22.2 No. 137:2018 (option -EX)  
 ETL Listed Class I, Division 2, Groups A, B, C, D, T5 (option -EX)  
 ETL Listed Class I, Zone 2, Groups IIA & IIB+H, IIC, T5 (option -EX)  
 Registered ISO 9001:2015  
 ICAO Annex 14, Volume II, Heliports, 5.3.9  
 American Bureau of Shipping (ABS) Type Approved Product

The PSF-5306x is a well-controlled very low height LED surface mounted helipad and helideck floodlight. The fixture's beam is narrow vertically and cutoff by the visor. The horizontal beam is effective over more than 120-degrees wide. The purpose of the PSF is to provide light "washing" the landing surface that provides improved conspicuity and depth perception to the pilot. There is a cable loop that exits the rear of the floodlight. It may be installed as a 2-inch height light directly on the surface or trunnion mounted from greater elevation. Standard with visor, adjustable L-brackets and black anodized finish.

## Point Type

PSF-53063-6 AC only: 96-305V, 50/60 Hz & High Intensity  
 PSF-53062-3 DC only: 10.8-26.4V & Medium Intensity

PSF-53063-6 HIGH INTENSITY



	PSF-53062	PSF-53063
Intensity:	2,052 lumens	4,725 lumens
Peak:	6,977 candelas	14,175 candelas
Power:	21.3 W (DC)	32.2 W 34.1 VA (AC)
Horizontal Beam % of Peak at +/-30 deg:	70%	
Horizontal Beam % of Peak at +/-45 deg:	35%	
Horizontal Beam % of Peak at +/-60 deg:	10%	
LED rated average life:	100,000 hours	
Rated color temperature:	6,500 Kelvin	
Temperature Range:	-40 to +55 deg C	
Frequency:	50/60 Hz	
Ingress Rating:	IP66 & IP67 **	
Weight:	8.0 lbs (3.6 kg)	

L-brackets will adjust overall height to between 2.0 & 2.6-inches. The beam angle may be adjusted vertically between +15 degrees & -15 degrees.

All external hardware is grade 316 (A4) stainless steel.

Metal castings are copper-free (< 0.2%) heat treated aluminum.

## Options (see Mounting Options page 2)

V: Visor, 6-inch projection (required)  
 T: Trunnion Mount  
 SF: Slipfitter, Stainless Steel\*  
 2P: Frangible Coupling, EMT\*  
 WW: Walkway Light, Reduced Intensity  
 BOL: Portable Battery Powered DC  
 SOL: Portable Solar Powered DC\*\*\*  
 JBX: External Junction Box Class I, Div 2  
 EX: Class I, Division 2 (Zone 2)  
       PSF-53063 only  
 RF: Wireless switching by handheld device^

^ For PSF-BOL battery light only  
 \* Requires option -T  
 \*\* PSF-53063 is IP67; both are IP66  
 \*\*\* PSF-53062-3 with wireless ON-OFF operation

PSF-53063-6-T-PLS



### MOUNTING OPTIONS

---	Basic <2-inch (50 mm) height with cable loop	T	Trunnion only; Frangible; screw to surface Detail H38
T-JBS	Junction Box, Surface with Trunnion Detail H40	T-JBP	Junction Box, Parapet-Wall; Side Entry (2) Detail H41
T-PLS	Inpavement Base; Frangible Detail H39	T-JBC	Junction Box, Parapet-Wall; Bottom Entry Detail H42
PLS	Inpavement Base behind 2-inch PSF Detail H64	T-JB	Trunnion; Frangible; Surface Junction Box Detail H61
		JB	Junction Box, Wall with 2-inch PSF Detail H63
-2P-PLS	FAA 2" Coupling for Extended Height; Frangible Use with 2" EMT (Requires -SF) Detail H43	-2P	FAA 2" Coupling for Extended Height; Frangible Uses 2" EMT (Requires -SF); add baseplate Detail H44

Note: The trunnion mount is frangible.

### PSF-53063-6 BRIGHTNESS CONTROL WITH 3-STEPS

PSF-53063 is compatible with Point Lighting brightness control technology. Brightness control requires the use of a PHC-66002 lighting system controller with option BC. The brightness is adjustable in three steps which are configurable on-site. This floodlight brightness control is separate from perimeter light option -VB 3-step brightness control.



**PSF-53062-3-BOL**  
Battery Powered Portable Surface Floodlight

- Two (2) hours total run-time
- 7,000 candelas
- Rechargeable AGM battery
- Optional wireless operation (-RF)
- Carrying handle
- May be staked or weighted in place
- Made in USA

## POINT SURFACE FLOODLIGHT PSF LED HELIPORT LOW PROFILE FLOODLIGHT PORTABLE WITH CARRYING CASE

---

### PSF-C093 PORTABLE WIRELESS SURFACE FLOODLIGHT SET

PSF-C093 includes battery, mounting plate, AC charging cable, wireless antenna, handheld wireless operator and strong permanent carrying and storage case with wheels.

Sold as a set of two (2) floodlights PSF-53062-3-C093-RF with carrying case and the above accessories. The wireless device operates at 918 MHz. The estimated runtime on full charge is over nine (9) hours.

PSF-53062-3-C093-RF  
Battery Powered Portable Surface Floodlight



PSF-C093  
Set of two (2) floodlights with all required  
accessories & wheeled carrying case

## POINT SURFACE FLOODLIGHT PSF LED HELIPORT LOW PROFILE FLOODLIGHT PORTABLE OR FIXED SOLAR POWERED

### PSF-53062-3-SOL-C094A-V FOR WIRELESS SWITCHING

This solar powered LED surface floodlight is a full brightness 4,800 candelas flood with wireless ON-OFF operation to a maximum run-time of two (2) hours per night based on 20-deg C ambient. Run-time is reduced in cold weather.

May be screwed in place. Includes visor (-V).

Optional foot-plate (-FP) for staking or weighting with sandbags or blocks.

Adjustable tilt angle.

Onboard wireless signal receiver & antenna for ON-OFF operation.

Wireless activation with handheld device PL11572-TRANS (-C-094A) or key fob included with -C094.

Note: PL11572-TRANS must be ordered separately one per site for any -C094A system.

Tested and certified to ingress protection IP66.

PSF-53062-3-SOL-C094A-V  
Solar Powered Surface Floodlight  
For Wireless Operation



### PSF-53062-3-SOL-C086-V FOR ALL NIGHT OPERATION

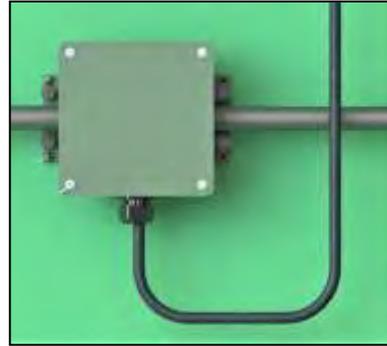
This version has a low profile, larger array and battery that allows the floodlight to operate all night automatically without manual switching at any site with an insolation value of 2.0 kWh/m<sup>2</sup>/day or higher.

PSF-53062-3-SOL-C086-V  
Solar Powered Surface Floodlight  
Operates All Night Automatically



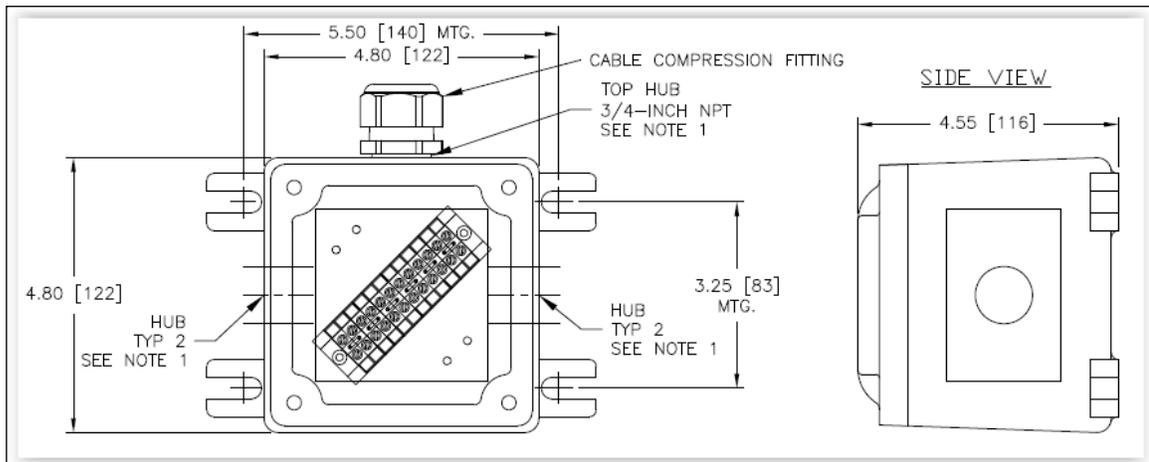
## POINT SURFACE FLOODLIGHT PSF LED HELIPORT LOW PROFILE FLOODLIGHT EXTERNAL JUNCTION BOXES

**Option -JB**  
Safe Area External Junction Box  
for use with PSF-53063-6 & PSF-53062  
see drawing 803357

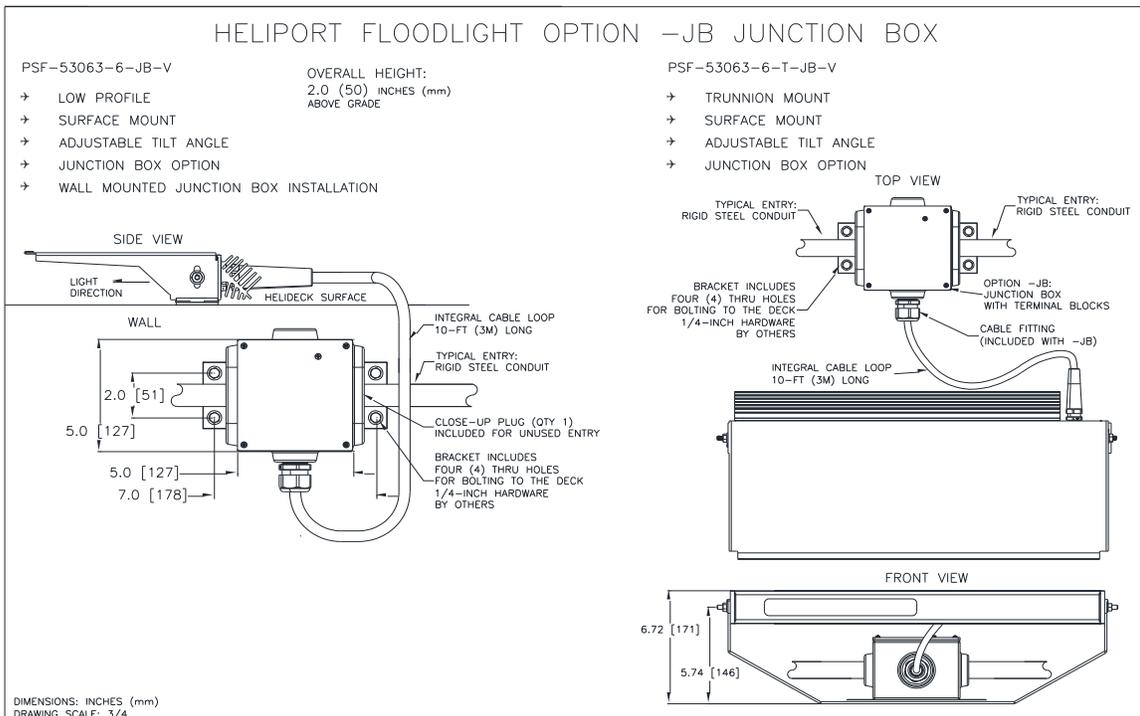
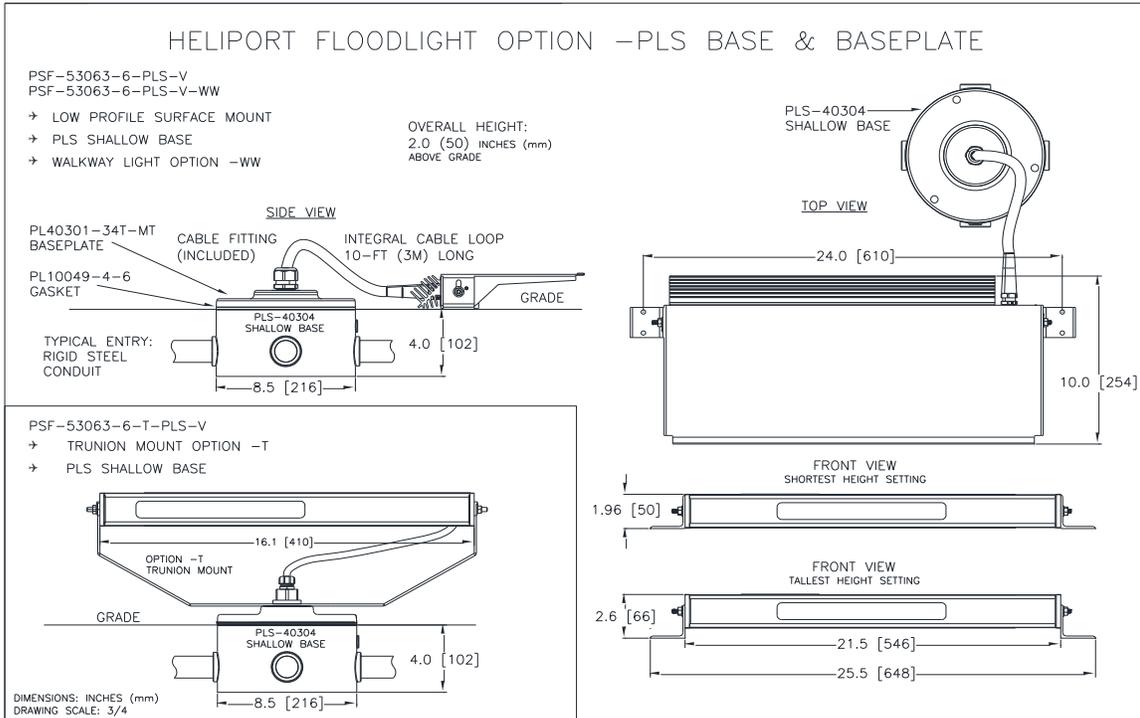


**Typical Mounting**  
PSF External Junction Box Standard  
with two 1-inch NPT feed-thru hubs

**Option -JBX**  
Class I, Division 2 External Junction Box  
for use with PSF-53063-6-EX  
see drawing 803358



## POINT SURFACE FLOODLIGHT PSF LED HELIPORT LOW PROFILE FLOODLIGHT SAFE AREA & HAZARDOUS AREA



Note: These details are compiled in the pdf file 0MOUNTINGS and are available in CAD upon request.



# POINT WIND CONE PWC LED FAA L-806 & L-807

Compliances: ETL Verified FAA L-806 FAA Advisory Circular 150/5345-27E  
 ETL Verified FAA L-807 FAA Advisory Circular 150/5345-27E  
 Registered ISO 9001:2015  
 Transport Canada CAR 325.31  
 ICAO Annex 14, Volume II Heliports, Paragraph 5.1  
 Australia CASA MOS Part 139, Section 9.6  
 UK CAP 437 ed. 8



A wind cone is used to visually indicate wind direction at airports and heliports. Point Lighting wind cones are installed at airports, hospitals, corporate headquarters and military bases around the world. Point recommends the PWC-8061L-AC-ON-FF-G-T-SM for roof top heliport installations. This wind cone is easily serviced from a step ladder or unbolted to lower.

FAA Type	Size	Lighting	Power	Windsock	Options
806: Frangible	1: 8-ft Sock, Size 1	L: Lighted	AC: 120-277V	ON: Orange	See Table
807: Rigid	2: 12-ft Sock, Size 2	Style I	3: 12-24V DC*	RW: Red/White	page 3
	4: 1.2m Sock (SEE PAGE 6)	U: Unlighted	0: None	WH: White	
	5: 2.4m Sock (SEE PAGE 6)	Style II		YL: Yellow CASA	

PWC-8071L-AC-ON-HBA  
FAA L-807 SIZE 1

Size 1: 8-ft sock has 18-inch diameter frame  
 Size 2: 12-ft sock has 36-inch diameter frame  
 Size 4: 1.2m sock has 0.3m diameter frame  
 Externally lighted only.  
 Size 5: 2.4m sock has 0.6m diameter frame  
 All lighted versions include FAA obstruction light  
 with NVG compatibility  
 Suitable for use at -55 to +55 degrees C  
 \* -3 (DC) is for internally lighted only option -B.



PWC-8061L-AC-ON-FF-SM  
FAA L-806 SIZE 1

### ROOF MOUNTED WIND CONES

For increased safety, POINT LIGHTING CORPORATION recommends the use of the low height 806 type wind cone with option -G, rigid machined coupling to reduce frangibility, and option -T, stainless steel tether. Any roof mounted equipment will be a hazard to persons below if it is struck or otherwise comes apart due to high wind, excessive snow accumulation, etc.

We recommend option -SM (see page 2) for all roof sites and it can be a useful method for ground concrete pads as well.

### HAZARDOUS ATMOSPHERE SITES

For a site requiring a wind cone with Class I, Division 2 rating, please see file WC115EX.



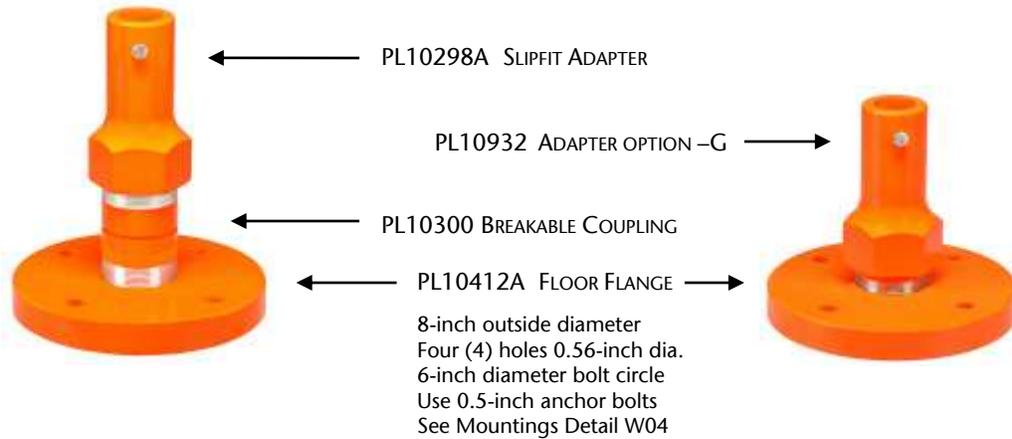
STAND MOUNT OPTION -SM  
FOR PWC-806XX  
INCLUDES BRACKET & JUNCTION BOX  
SEE "MOUNTINGS" DETAILS W01 & W03

FRANGIBLE MOUNTING  
TYPICAL FOR GROUND SITES

RIGID MOUNTING  
TYPICAL FOR ROOF SITES  
WITH OPTION -G RIGID COUPLING



### PWC-8061L COUPLING & FLOOR FLANGE SUBASSEMBLY



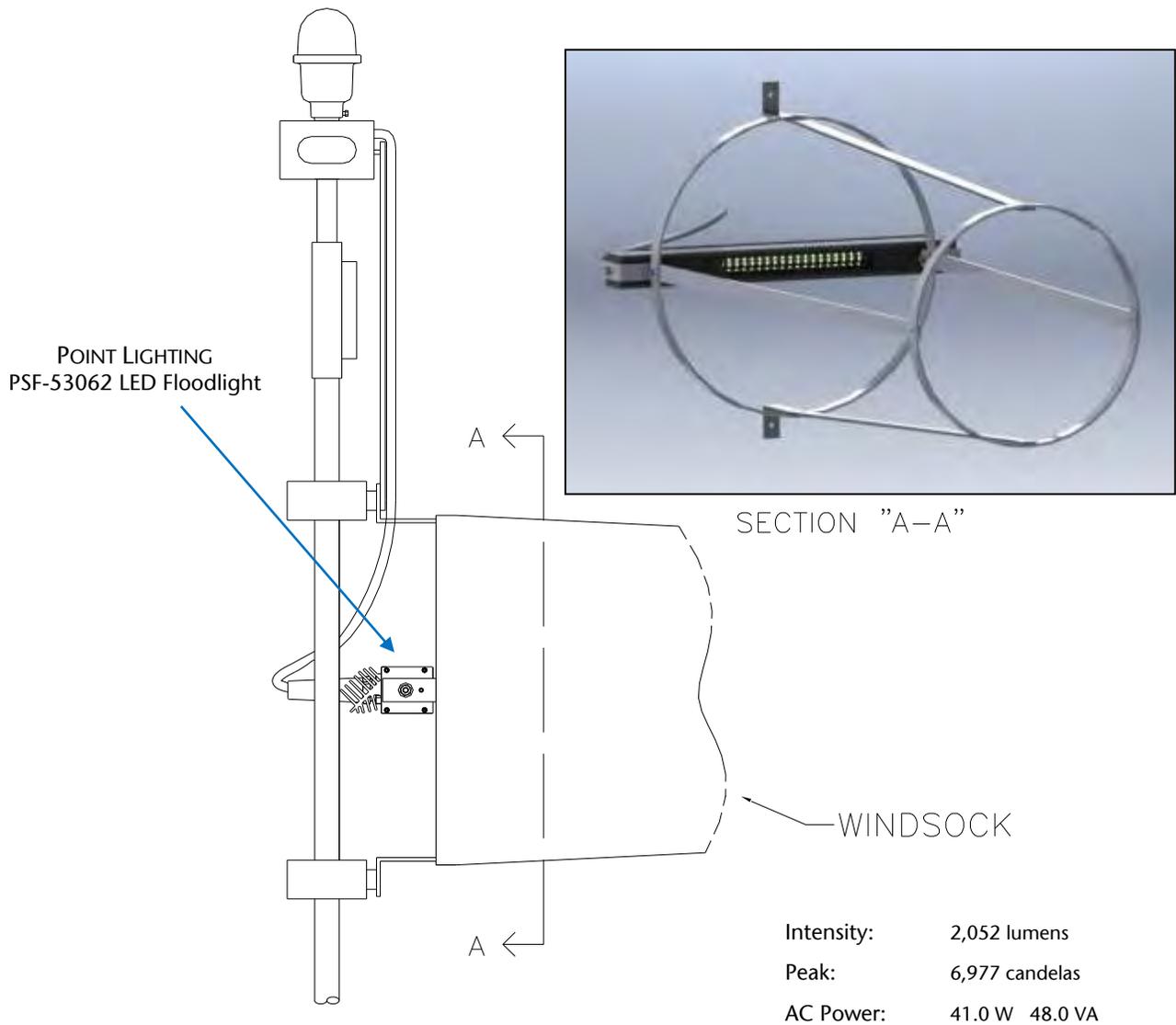
PWC SIZE 1 WITH LED LIGHTING



### PWC WIND CONE OPTIONS

OPTION	DESCRIPTION	806	807
HBA	Hinged Base Tapered Aluminum Pole (includes anchor bolts)		→
FF	Floor Flange (anchor bolts by others)	→	
SSP	Stainless Steel 316L Pole (add option –A and consider option –SM)	→	
LIR	Fiberglass Frangible Pole	→	
WM	Wall Mounted Steel Pole		→
A	Crating of pole (required for Type 807 export and Type 806 -SSP)	→	→
B	Internally Lighted with LED floodlight & LED obstruction light	→	→
C	Normal External Lighting plus Internally Lighted	→	→
E	Double Red Obstruction Light	→	→
F	Obstruction Light Only (for an unlighted wind cone)	→	→
FM	Flange Mount (requires option –SSP and see page 4)	→	
G	Rigid Machined Coupling in place of frangible coupling	→	
H	Pole Painted with Red & White Stripes	→	→
J	Pole Painted Red	→	→
JB	Junction Box type PLB with blank coverplate (see 0MOUNTINGS)	→	→
BBS	Battery Backup System minimum 3 hours	→	→
P	FAA Photoelectric Controller on a junction box	→	→
JB1-P	FAA PEC with PLB Junction Box & baseplate (see 0MOUNTINGS)	→	→
JB1-OS	Override Switch (ON-OFF) with PLB Junction Box & baseplate	→	→
OS	Override Switch (ON-OFF) on a junction box	→	→
SM	Stand Mount with bracket & junction box	→	→
T	Tether of stainless steel for securing on a roof	→	

### PWC OPTION -B LIGHTING ASSEMBLY DETAIL

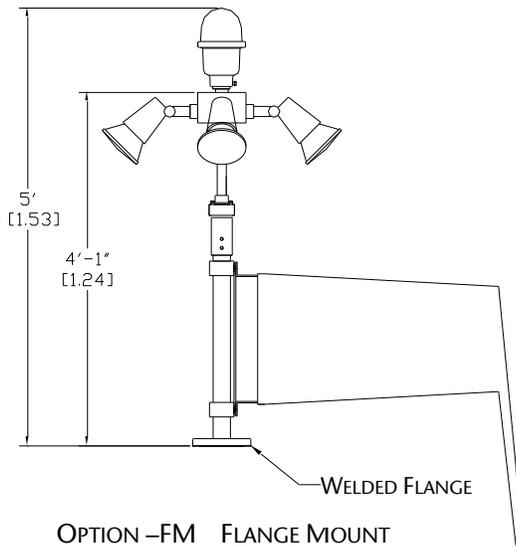


PWC-8061U-0-ON-SSP-A-SM  
UNLIGHTED WITH STAINLESS STEEL POLE  
AND STAND MOUNT

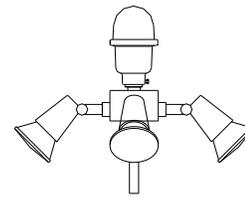


The PWC-806 with stainless steel 316L pole –SSP is recommended for marine offshore use. This is a “safe area” wind cone. Hazardous area lighted Class I, Division 2 and ATEX/IECEx models are available and have separate catalog files. This unit is available with the normal obstruction light and external floodlights.

As shown above, option –SM Stand Mount is the best installation. Shipping requires option –A crating of the pole and long components.

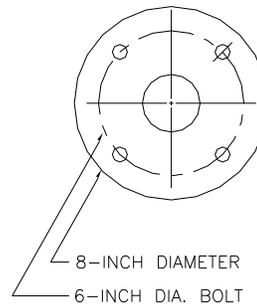


OPTION –FM FLANGE MOUNT  
PWC-8061L-AC-ON-SSP-D-FM



LIGHTING ASSEMBLY  
4 FLOODLIGHTS

FLOOR FLANGE  
BOLT PATTERN

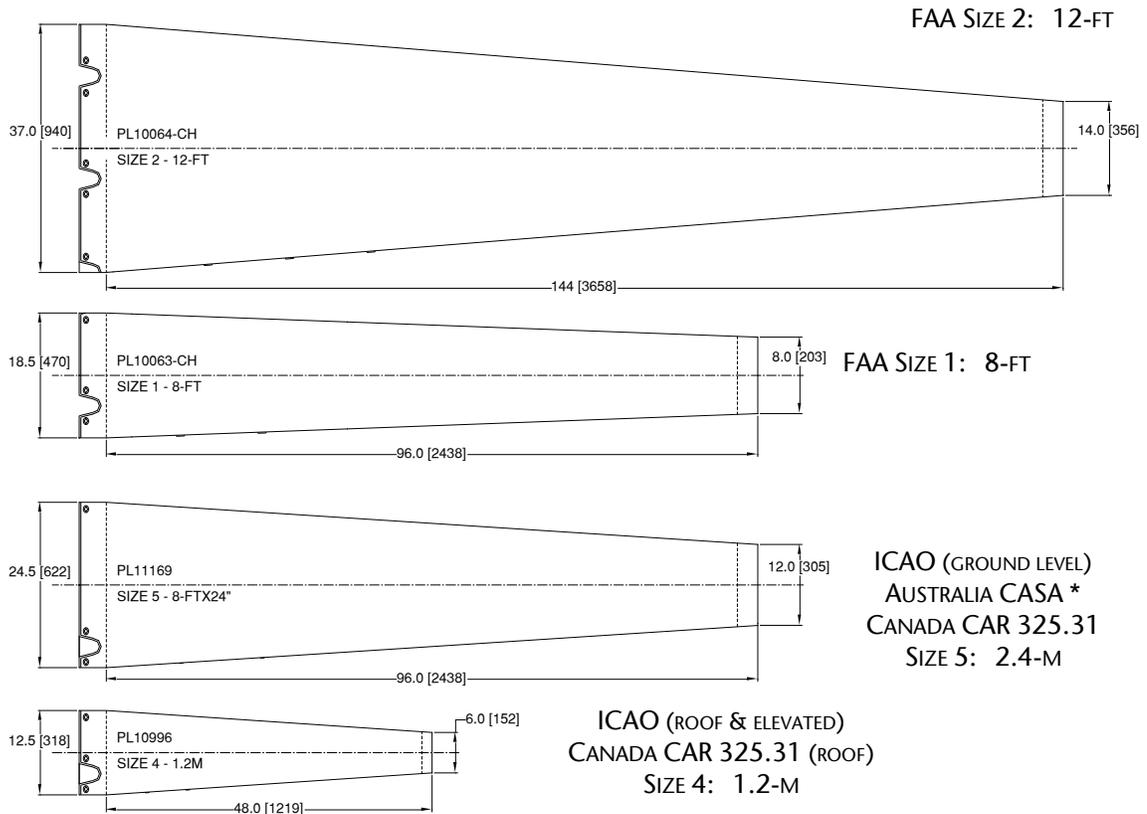


### POWER CONSUMPTION

AC POWER:	WATTS	VA	DC POWER:	WATTS
PWC-8061L	128.0	137	PWC-8061L-B	10.3
PWC-8071L	128.0	137	PWC-8071L-B	10.3
PWC-8072L	128.0	137		
PWC-8061L-B	41.0	48	PWC-8061L-C	26.6
PWC-8071L-B	41.0	48	PWC-8071L-C	26.6
PWC-8072L-B	41.0	48		
PWC-8061L-C	165.0	176		
PWC-8071L-C	165.0	176		
PWC-8072L-C	165.0	176		

Note: Size 5 is the same as Size 1

### PWC WINDSOCK SIZES



\* For Australia MOS Part 139, a "PALS" is a PHC-RC system controller or a PRC radio controller. The PHC or PRC must have option -C072 which provides the 10-minutes flashing of the wind cone during radio control time-out.

### FAA CERTIFIED PAINT PROCESS SPECIFICATION

The wind cone pole assembly shall be brush painted with a water based stainless steel pigmented primer rated for 30 years life in corrosive atmospheres. The finish coat applied shall be a water based gloss acrylic paint in aviation orange color according to Federal Standard 595 color #12197.

### FAA CERTIFIED WINDSOCK SPECIFICATION

The aviation orange nylon triple sewn windsock shall be reinforced at key points including the end of the basket to resist wear from abrasion and it shall be fitted with two or more brass grommets to prevent water accumulation in the sock. The windsock shall mount on a rigid aluminum frame basket for the first several feet to enhance visibility. The sock shall attach to the basket securely by means of stainless steel twist-lock marine grade hardware.

### PWC SPARE PARTS

PL10063-CH	Windsock Size 1 Orange 8-ft	PL10590	Windsock Size 1 Red-White 8-ft
PL10064-CH	Windsock Size 2 Orange 12-ft	PL10552	Windsock Size 2 Red-White 12-ft
PL10996	Windsock Size 4 Orange 1.2m	PL10997	Windsock Size 4 Red-White 1.2m
PL11169	Windsock Size 5 Orange 2.4m	PL11169-YL	Windsock Size 5 Yellow 2.4m
PL10993-1	Lamp 32w LED AC	PSF-53062-3	Floodlight, LED DC for option -B
PL10266	Lampholder, External	PSF-53062-6-HB	Floodlight, LED AC for option -B
POL-21007-1B-R-34B-S	Obstruction Light AC	PL10290-4-AC	Lighting Assembly, External
PL10290-B-AC	Lighting Assembly, Internal	PL10290-C-AC	Lighting Assembly, Int & Ext
PL10312-14-S	HBA Pole Subassembly	PL10289	Basket Subassembly Size 1
PL10547A	Coupling Internal Electrical -B	PL10367	Basket Subassembly Size 2
PL10290-4-AC	Lighting Subassembly (4) AC	PL10290-B-AC	Lighting Subassembly Internal AC
PL10299-6.5	Bearing Support L-807 Size 1	PL10299-8.5	Bearing Support L-807 Size 2
PL10299-9.5	Bearing Support L-806 Size 1	PL10319-S	Bearing Subassembly, Spare
PL10298A	Adapter L-806 (orange)	PL10412A	Floor Flange L-806 (orange)
PL10300	Breakable Coupling L-806 (orange)	PL10932	Machined Adapter option -G

### FIELD PAINTING KITS

PL10419-806	Paint Kit PWC-806
PL10419-807	Paint Kit PWC-807

Note: All 806 & 807 wind cones are shipped factory painted. These kits are normally for field repainting.

### PWC-807 POLE INTERFACE STAINLESS STEEL COLLAR SUBASSEMBLY

### PWC BEARING & BRACKET SUBASSEMBLY



### PACKING & SHIPPING INFORMATION

PWC-8061L-FF	Carton 1: 118 x 8 x 8 inches, 30 pounds – Bearing Assembly Carton 2: 19 x 19 x 9 inches, 30 pounds – Lighting Kit & Windsock  Option –SM Carton 3: 25 x 13 x 7 inches, 30 pounds – SM option
PWC-8071L-HBA (domestic)	Carton 1: 80 x 8 x 8 inches, 40 pounds – Bearing Assembly & Anchor Bolts Carton 2: 175 x 15 x 13 inches, 70 pounds – Pole Carton 3: 19 x 19 x 9 inches, 30 pounds – Lighting Kit & Windsock
PWC-8071L-HBA (export crated)	Crate 1: 180 x 15 x 13 inches, 170 pounds – Bearing Assy, Anchor Bolts & Pole Carton 1: 19 x 19 x 9 inches, 30 pounds – Lighting Kit & Windsock
PWC-8072L-HBA (domestic)	Carton 1: 80 x 8 x 8 inches, 40 pounds – Bearing Assembly & Anchor Bolts Carton 2: 175 x 15 x 13 inches, 70 pounds – Pole Carton 3: 38 x 38 x 9 inches, 50 pounds – Lighting Kit & Windsock
PWC-8072L-HBA (export crated)	Crate 1: 180 x 15 x 13 inches, 170 pounds – Bearing Assy, Anchor Bolts & Pole Carton 1: 38 x 38 x 9 inches, 50 pounds – Lighting Kit & Windsock
PWC-8061L-LIR (domestic)	Pallet 1: 40 x 48 x 35 inches, 195 pounds – Lighting, Anchor Bolts, Parts Carton 1: 140 x 8 x 8 inches, 39 pounds – Pole Carton 2: 66 x 8 x 8 inches, 27 pounds – Bearing Assembly
PWC-8061L-LIR (export crated)	Pallet 1: 40 x 48 x 35 inches, 195 pounds – Lighting, Anchor Bolts, Parts Carton 1: 150 x 13 x 15 inches, 116 pounds – Pole & Bearing Assembly
PWC-8071L-WM	Carton 1: 122 x 8 x 8 inches, 15 pounds - Pole Carton 2: 19 x 19 x 9 inches, 30 pounds - Lighting Carton 3: 19 x 19 x 9 inches, 35 pounds - Wall Brackets Carton 4: 118 x 8 x 8 inches, 30 pounds – Bearing Assembly



## POINT LIGHTING CORPORATION

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Tel 01 860.243.0600  
email: [Info@PointLighting.com](mailto:Info@PointLighting.com)

USA  
Plant: 61-65 W. Dudley Town Rd, Bloomfield, CT  
Fax 01 860.243.0665  
website: [www.PointLighting.com](http://www.PointLighting.com)



# POINT OBSTRUCTION LIGHTS POL LED v5 POINTSPEC® SERIES

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 ETL Verified FAA L-810 to FAA AC 150/5345-43H at -55 deg C to +55 deg C  
 Registered ISO 9001: 2015  
 Compliance to ICAO Annex 14 Low Intensity Types A (10 cd) & B (32 cd)  
 Compliance to CL810 Transport Canada CAR 621, Table 13-2  
 Compliance to CAP 437 & UK CAP 168 Table 6A.1 Low Intensity (Group A)  
 IMO 2009 MODU Code (2010) paragraphs 13.5.24 & 13.5.25  
 American Bureau of Shipping (ABS) Type Approved Product

The POL LED red low intensity obstruction lights are for use on aviation obstructions.

- ☑ The casting is copper-free (< 0.25%) aluminum.
- ☑ The lens is glass.
- ☑ The hardware is 316 (A4) stainless steel.
- ☑ The LED's are rated for 100,000 hours.
- ☑ Only 1.5 watts per head for 120V.
- ☑ IP66 tested and listed.
- ☑ Standard with the exclusive yellow Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish.
- ☑ Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	Power*	Specification	Color	Mounting	Style	Options^
POL-21005	1: 120v 2: 220v 3: 12v DC 4: 24v DC 5: 48v DC 6: 277v	B: ICAO Types A & B B: Trans. Canada B: UK CAP 168 Group A	R: Red	34B: ¾-inch, Bottom 10B: 1-inch, Bottom 34F: ¾-in, Feed-thru M20B: Metric, Bottom SF: Slipfitter 2.375-in (60 mm)	S: Single D: Double See page 3	NC: NVG Compatible CF: Cable Fitting P: Photoelectric Controller ^ See page 4

POL-21005-1B-R-34B-D  
DOUBLE OBSTRUCTION LIGHT



POL-21005-1B-R-34B-S  
SINGLE OBSTRUCTION LIGHT



\* AC voltages are nominal. See page 4 for operating range; suitable for 50 or 60 Hz.  
 For mounting options and plan details, see file 0MOUNTINGS  
 All details are available as AutoCAD files for project plans  
 FAA approved "lamp" number 631.



POL-21005-1B-R-34F-S3  
SINGLE OBSTRUCTION LIGHT  
WITH SIDE-WALL MOUNT JUNCTION BOX



POL-21005-1B-R-SF-S  
SINGLE OBSTRUCTION LIGHT  
WITH 60MM SLIPFITTER  
FITS 2-3/8-INCH TENON



POL-21007-5B-R-SOL  
PORTABLE SOLAR POWERED LIGHT  
SEE FILE OL188POLV7



POL-21005-1F-R-34B-EX-MT  
SINGLE OBSTRUCTION LIGHT  
CLASS I, DIVISION 2  
SEE FILE OL194POLEX



POL-21005-1B-R-34B-D-P  
DOUBLE OBSTRUCTION LIGHT  
WITH PREWIRED  
FAA PHOTOELECTRIC CONTROL



POL-21005-1B-R-34B-S3-MT  
SINGLE OBSTRUCTION LIGHT  
WITH GREEN MARINE TREATMENT  
& JUNCTION BOX



POL-21005-1B-R-34B-S3-P  
SINGLE OBSTRUCTION LIGHT  
WITH JUNCTION BOX & PREWIRED  
FAA PHOTOELECTRIC CONTROL



FAA PHOTOELECTRIC CONTROLLER  
PPC-40700-1-34T  
SEE FILE OL410PPC



# STYLE SELECTION CHART      POINT OBSTRUCTION LIGHTS      POL v5

Style	Transfer	Alarm Non-Isolated	Alarm Isolated	Pilot Light	Flashing	Description
-S						Standard Single
-S1					■	Single flashing (no junction box & no sync)
-S15					■	Single flashing, w/alarm line & J-box (Note 1 & no sync)
-S15K					■	As above only for use w/POC to flash all lights in sync
-S1.3					■	Single with junction box: flashing (Note 1)
-S2		■				Single: non-isolated alarm (Note 1)
-S2.1		■				DC only; same as Style –S2 for use with POC
-S3						Single: integral junction box & cover (Note 1)
-S4			■			Single: isolated failure alarm (Note 1)
-S5.3					□	Dual Mode Single: flashing, but may be set in the field to be steady-burning (Note 1)

-D						Double: both heads operating
-DT	■					Double: operating head & standby with transfer
-D1	■			■		Double: transfer & pilot light
-D2	■	■				Double: transfer & non-isolated alarm (Note 2)
-D2.2		■				Double: both heads operating & non-isolated alarm
-D3	■	■		■		Double: transfer, non-isolated alarm & pilot light
-D4	■		■			Double: transfer & isolated alarm (Note 2)
-D4.2			■			Double: both heads operating & isolated alarm
-D5	■		■	■		Same as Style –D4 with pilot light (Note 2)
-D6	■		■			Same as Style –D4 prewired with six (6) wires
-D7					■	Double: both heads flashing
-D8	■				■	Double: primary head flashes and transfer to standby head which flashes; no alarm
-D10	■	■			■	Same as Style –D8 with alarm line
-D10K	■	■			■	As above only for use w/POC to flash all lights in sync
-D13	■		■			Double: transfer, primary head alarm, standby head alarm & power failure alarm; tagged wires
-D14			■		■	Double: both heads flashing with isolated alarm
-D15		■			■	Double: both heads flashing; non-isolated alarm
-D15K		■			■	As above only for use w/POC to flash all lights in sync. Use for FAA A1 towers. No data cable. (Note 1)
-D16	■			■	■	Double: primary head flashes and transfer to standby head flashes; pilot light on transfer
-D18	■	■				Double: transfer, primary head alarm, standby head alarm; non-isolated alarms
-D19	■		■		■	Double: primary head flashes and transfer to standby head flashes; with isolated alarm line

Note 1: This single has a J-box & cover below the LED head assembly; box is required for any single with option –P.

Note 2: Alarm activates on transfer



### SOLAR POWERED POL-21005 OBSTRUCTION LIGHTS

Choose one of the catalog numbers below to receive the mounting arrangement displayed in the graphic.

The POL-21005 is the proper selection for ICAO low intensity Types A & B and for Transport Canada CL810 certified by Intertek Testing Service.

The light will operate at night automatically year round anywhere the solar irradiance is greater than 1.0 kWh/m<sup>2</sup>/day.

Important - All POL-SOL systems by definition include:

- POL-21005 fixture
- Option -BKTU wall-post bracket\*\* for the POL
- Option -CF cable fitting
- 3-meters SOW cable loop to the solar controller
- Solar array & solar controller with battery
- Floor-roof brackets\* for the solar array

\* Addition of option -PM changes to post brackets for the array & includes BKTU setup.

\*\* See below for the POL bracket details.



POL-21005-3B-R-34B-S3-SOL



POL-21005-3B-R-34B-S3-SOL-PM

POL-21005 SINGLE WITH OPTION -BKTU  
MAY BE WALL-MOUNTED OR POST-MOUNTED. THE POST MAY BE CONDUIT  
OR PIPE TO A MAXIMUM OUTSIDE DIAMETER OF 3-INCHES (76MM).  
THIS BRACKET IS INCLUDED IN ALL SOLAR POWER VERSIONS (-SOL)



## TECHNICAL NOTES & OPTIONS

Alarm options must be selected at time of initial order. Alarms cannot be added in the field or retrofitted. POL LED lights cannot be monitored by 3<sup>rd</sup> party systems or controllers without selecting an alarm version of the POL LED. The POL optical subassembly is factory sealed to prevent moisture penetration and it is not serviceable.

**Option –MT: Marine Treatment - Green** Note: Yellow MT is standard  
The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.

**Option –NC: NVG Compatible**  
Adds infrared LED at 855 nm to allow visibility to pilots with or without night vision goggles.  
Infrared Radiant Power F-array: 137 mW/sr B-array: 205 mW/sr

**Option –P: Photoelectric Control**  
Adds a prewired FAA verified PEC to any single with a junction box or any double.

**Option –FF: Floor Flange Mounting**  
Simple square flat mounting plate.

**Option –CF: Cable Fitting**  
Cable compression fitting for outside diameter: 0.5 to 0.625-inch (12.7 to 15.9-mm). We suggest using with option -BKTU bracket kit.

**Option –BKTU: Mounting Bracket Kit** see Details in the file OPOINT BRACKETS  
All-purpose aluminum bracket kit for single or double POL for wall-mount or with U-bolts to clamp to the structure.  
Note: Solar power mounting option -PM includes the BKTU setup by definition.

**Option –OS: Override Switch**  
For use with photoelectric controller option –P. Cover mounted 3-position switch ON-OFF-AUTO. Requires a double or single with junction box. For remote override switch, add item PL40110-3.

**Option –SOL: Solar Powered**  
Solar power supply including array, controller & battery.

## POWER CONSUMPTION PER POL LED LIGHT HEAD

Code	Type	Voltage	Frequency	Watts*	mA	VA*
-1B	ICAO B & TRAN CAN	120 AC	50/60 Hz	6.9	63	7.6
-2B	ICAO B & TRAN CAN	220 AC	50/60 Hz	6.9	34	7.4
-3B	ICAO B & TRAN CAN	12 DC	---	4.3	470	4.3
-4B	ICAO B & TRAN CAN	24 DC	---	4.3	230	4.3
-5B	ICAO B & TRAN CAN	48 DC	---	5.0	104	5.0
-6B	ICAO B & TRAN CAN	277 AC	50/60 Hz	6.9	28	7.9

Note: For option –NC, add 1.0 watts (1.1 VA)

\*Power consumption for AC units includes the effect of the unit's power factor which accounts for the difference between watts and volt-amperes. Measurements were made at the nominal AC voltages. The operating range for 120v units: 93 - 144v; for 220v units: 176 - 250v; for 277v units: 263 -291v



## POL LED SPECIFICATIONS

### SPECIFICATIONS COMMON TO ALL POL LED VERSIONS

The red LED lighted (specify: voltage) aviation obstruction light shall be tested and certified ICAO low intensity Type B. The obstruction light shall operate properly at 50 or 60 Hz at an input voltage supply of 120V +/-20% (93V to 144V) or, for 220V units, 176V to 250V or, for 277V units, +/-5% (263V to 291V). Within the preceding ranges, the output to the LED board shall be a controlled, stabilized constant current. The obstruction light shall not exceed 1.5 watts per head for FAA L-810 at 120V.

The AC obstruction lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels, UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-04, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures. Sealed to IP66 ingress protection.

Special Technical Note\*: DC light fixtures shall be reverse polarity protected.

\* Competitors' units will fail if installed with reverse polarity.

The unit shall have passed the FAA certification tests: the constant high temperature test to +130 deg F (+55 deg C) and the constant low temperature test to -67 deg F (-55 deg C) conducted in accordance with US MILSTD-810F, Method 501.4, Procedure II; the wind-blown rain test conducted in accordance with US MIL-STD-810F, Method 506.3, Procedure I; and the humidity test shall be in accordance with US MIL-STD-810E, Method 507.3, Procedure I. The complete test regime shall exceed the requirements of NEMA 4X and IP 66. The light head shall be marine treated aviation yellow for high corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I, paragraph 4.5.2.

The clear lens shall be strong soda lime glass with the wave-length matched to the LEDs to permit the fullest light transmission. The lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow.

The red emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LEDs shall not exceed five (5) in number and shall be the latest technology providing uniform light output over the range required by the governing standard. The LED average life shall exceed 100,000 hours.

The LEDs shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LEDs that can be bent out of position shall be unacceptable and cause for rejection. The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion.

The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). All v5 units shall have the power supply and flasher board (if any) potted in the fixture (head subassembly) casting. There shall be a clear design element for the dissipation of LED heat to insure the LEDs do not fail prematurely.

The double LED light unit shall have an integral cast aluminum junction box with a minimum of 100 cubic inches of enclosed wiring space accessible from the front of the light unit. The wiring access cover shall be gasketed to be watertight, shall have captive screws and shall be secured to the unit with a tether. The cover tether and all hardware shall be stainless steel.

The red LED aviation obstruction light shall be POINTSPEC Series POL-21005 manufactured by Point Lighting Corporation.

Important Note: Alarm options must be selected at time of initial order. Alarms cannot be added in the field or retrofitted. POL LED lights cannot be monitored by 3<sup>rd</sup> party systems or controllers without selecting an alarm version of the POL LED.

### WEIGHT, DIMENSIONS & SHIPPING DATA

inches (mm)						Multi-Pack Carton		
	Weight	Height	Width	Depth	Qty	Weight	Dim (inches)	
POINTSPEC Single:	3.5 lbs 1.6 kg	8.6 (217)	6.0 (152)	5.0 (127)	12	47 lbs 21.3 kg	22 x 15 x 17	
POINTSPEC Double:	11.8 lbs 5.4 kg	13.3 (337)	14.9 (378)	5.0 (127)	2	27 lbs 12.3 kg	19 x 19 x 19	
Wind Loading:	Effective Projected Area (EPA) for POINTSPEC Lights							
	Double: 0.69 sq ft	Single (no box): 0.19 sq ft	Single (with box): 0.37 sq ft					

## POINT LIGHTING CORPORATION

Mail: P.O. Box 686, Simsbury, CT 06070  
Tel 01 860.243.0600  
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Plant: 61-65 W. Dudley Town Rd, Bloomfield, CT  
USA  
Fax 01 860.243.0665  
website: www.PointLighting.com



**POINT OBSTRUCTION LIGHTS  
POL LED v6  
POINTSPEC® SERIES**

**Compliances:** Intertek (ETL) Verified to L-810 to FAA AC 150/5345-43J at -55 deg C to +55 deg C  
Compliance to ICAO Annex 14 Low Intensity Type A  
FAA Engineering Briefs 67D & 98  
Registered ISO 9001: 2015

The POL LED red low intensity obstruction lights are for use on aviation obstructions.

- The casting is copper-free (< 0.25%) aluminum.
- Red & IR LEDs monitored for failure.
- The hardware is 316 (A4) stainless steel.
- Only 4.0 watts per head.
- Standard with the exclusive yellow Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".
- The lens is glass.
- Alarm line is standard.
- The LED's are rated for 100,000 hours.
- NVG Compatibility is standard.

Point Type	Power	Color	Mounting	Style
POL-21006	1F: 96-305v	R: Red	34B: ¾-inch, Bottom	S2: Single w/alarm line
	3F: 10.8-32v DC		10B: 1-inch, Bottom	S2.3: Single w/alarm line & junction box
	5F: 30-52.8V DC			D2: Double w/transfer to standby & alarm
				D2.2: Double w/both heads ON & alarm
				D3: Double w/transfer, alarm & pilot light

Power Consumption per Head:

Voltage	Amps	VA	Watts
120	0.057	6.84	4.05
277	0.033	9.08	4.03
12	0.267		3.2
24	0.142		3.4

- Option -P: FAA Photoelectric Control  
Adds a prewired FAA PEC to -S2.3 or double
- Option -BKTU: Universal bracket kit for POL
- Option -SF: Slipfitter 2.375-in stainless steel
- Option -UPS: Battery backup; see page 3
- Option -SOL: Solar Powered; see page 2
- Option -PM: Solar array post mount max 3.0-in OD

**POL-21006-1F-R-34B-D2**  
DOUBLE OBSTRUCTION LIGHT  
WITH ALARM LINE



**POL-21006-1F-R-34B-S2**  
SINGLE OBSTRUCTION LIGHT  
WITH ALARM LINE



**POL-21006-1F-R-34B-S2.3**  
SINGLE OBSTRUCTION LIGHT  
WITH JUNCTION BOX & ALARM LINE



### SOLAR POWERED POL-21006 OBSTRUCTION LIGHTS

Choose one of the catalog numbers below to receive the mounting arrangement displayed in the graphic.

The POL-21006 is the proper selection for FAA L-810 certification as verified by Intertek Testing Service.

The light will operate at night automatically year round anywhere the solar irradiance is greater than 1.0 kWh/m<sup>2</sup>/day (>1.2 for -D2.2).

Important - All POL-SOL systems by definition include:

- POL-21006 fixture
- Option -BKTU wall-post bracket\*\* for the POL
- Option -CF cable fitting
- 3-meters SOW cable loop to the solar controller
- Solar array & solar controller with battery
- Floor-roof brackets\* for the solar array

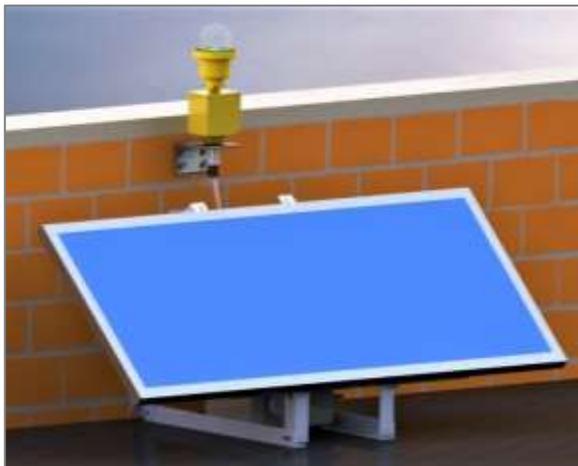
\* Addition of option -PM changes to post brackets for the array & includes BKTU setup.  
\*\* See page 4 for the POL bracket details.



POL-21006-3F-R-34B-D2-SOL-PM  
POL-21006-3F-R-34B-D2.2-SOL-PM



POL-21006-3F-R-34B-D2-SOL  
POL-21006-3F-R-34B-D2.2-SOL



POL-21006-3F-R-34B-S2.3-SOL



POL-21006-3F-R-34B-S2.3-SOL-PM



### UNINTERRUPTIBLE POWER SUPPLY OPTION -UPS PL11609-1 UPS UNIT

Note: Add option -UPS for a one POL or purchase PL11609-1 to power multiple POL obstruction lights and/or PFB-37003 flashing red beacons.

Required: For one POL, add option -P. For multiple lights, add one PPC-40700-1-34T on the output (load side) of PL11609-1 UPS unit.

See chart below for estimated run-times.

Note: Intended for emergency use only; do not use for regularly scheduled shutdowns of power such as nights and weekends.

For use with a POC system controller, the POC must be 120V and the PL11609-1 must be installed on the power feed to the POC (i.e. upstream of the POC & PPC).

#### Features & Functions:

- Automatic operation upon loss of power & upon restoration of power.
- Automatic battery charging.
- AC power Input: 96-264V AC
- Temperature range: -20-deg C (-4-deg F) to +55-deg C (131-deg F)
- The UPS sends 120V AC to the load. Use universal AC or 120V lights.
- Battery low voltage disconnect to protect the battery.
- The output to the load has a true pure sine wave.
- NEMA 4X (IP66) fiberglass enclosure.
- Includes 2 x 3/4-inch NPT hubs and 1 x 3/4-inch cable gland.

RUN-TIME IN NUMBER OF NIGHTS (12 HOURS)

	0 POL	1 POL	2 POL	3 POL	4 POL	5 POL	6 POL
0 PFB		9.4	5.4	3.8	2.9	2.3	1.9
1 PFB	5.8	3.9	2.9	2.3	1.9	1.6	1.4
2 PFB	3.0	2.4	1.9	1.6	1.4	1.2	1.1
3 PFB	2.0	1.7	1.4	1.3	1.1	1.0	0.9
4 PFB	1.5	1.3	1.2	1.0	0.9	0.9	0.8

#### Notes on run-times and battery capacity:

- FAA photocontrol is required as either -P for one light or use PPC-40700-1-34T.
- Based on POL-21006-1F series. For POL-21005-1B, count each POL as a PFB-37003.
- Run-times are based on a 77-deg F (25-deg C) ambient temperature.
- Battery capacity will be between 65-85% at 0-deg C (32-deg F)
- Battery capacity will be between 25-45% at -20-deg C (-4-deg F)
- "POL" means POL-21006-1F-R number of operating heads.
- "PFB" means PFB-37003-R-1 flashing red beacon.



POL-21006-1F-R-34F-S2.3  
SINGLE OBSTRUCTION LIGHT  
WITH SIDE-WALL MOUNT JUNCTION BOX



POL-21006-1F-R-34B-D2.2-P  
DOUBLE OBSTRUCTION LIGHT  
WITH PREWIRED FAA  
PHOTOELECTRIC CONTROL



POL-21006-1F-R-34B-S2.3-P  
SINGLE OBSTRUCTION LIGHT  
WITH JUNCTION BOX & PREWIRED  
FAA PHOTOELECTRIC CONTROL



POL-21006-1F-R-34B-S2-SF  
SINGLE OBSTRUCTION LIGHT  
WITH 60MM SLIPFITTER  
FITS 2-3/8-INCH TENON



POL-21006 SINGLE & DOUBLE WITH OPTION -BKTU  
MAY BE WALL-MOUNTED OR POST-MOUNTED. THE POST MAY BE CONDUIT  
OR PIPE TO A MAXIMUM OUTSIDE DIAMETER OF 3-INCHES (76MM).  
THIS BRACKET IS INCLUDED IN ALL SOLAR POWER VERSIONS (-SOL)



FAA PHOTOELECTRIC CONTROLLER  
FOR A CIRCUIT OF POL'S  
PPC-40700-1-34T SEE FILE OL410



### WEIGHT, DIMENSIONS & SHIPPING DATA

	inches (mm)					Multi-Pack Carton			
	Weight	Height	Width	Depth	Qty	Weight	Dim (inches)		
POINTSPEC Single:	3.5 lbs 1.6 kg	8.6 (217)	6.0 (152)	5.0 (127)	12	47 lbs 21.3 kg	22 x 15 x 17		
POINTSPEC Double:	11.8 lbs 5.4 kg	13.3 (337)	14.9 (378)	5.0 (127)	2	27 lbs 12.3 kg	19 x 19 x 19		
Wind Loading:	Effective Projected Area (EPA) for POINTSPEC Lights								
	Double: 0.69 sq ft		Single (no box): 0.19 sq ft		Single (with box): 0.37 sq ft				

## POINT LIGHTING CORPORATION

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USA  
4

Plant: 61-65 W. Dudley Town Rd, Bloomfield, CT  
Fax 01 860.243.0665  
website: www.PointLighting.com



# POINT OBSTRUCTION LIGHTS POL LED v7 POINTSPEC® SERIES

Compliances: Compliance to L-810 to FAA AC 150/5345-43H at -55 deg C to +55 deg C  
 Compliance to ICAO Annex 14 Low Intensity Types A (10 cd) & B (32 cd)  
 Compliance to CL810 Transport Canada CAR 621, Rev. 2021/11/02  
 Registered ISO 9001: 2015  
 Compliance to UL 1598 at -40 deg C to +55 deg  
 UL Tested to IP66 & IP67 Ingress Protection  
 FAA Engineering Briefs 67D & 98; Registered ISO 9001: 2015

- Red & IR LED onboard failure monitoring.
- The hardware is 316 (A4) stainless steel.
- Only 2.5 watts per head.
- The casting & lens are specially engineered forms of polycarbonate materials.
- Suitable for outdoor use with respect to exposure to ultraviolet light, water exposure & immersion in accordance with UL 746C (f1).
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".
- NVG Compatibility is standard.
- The LED's are rated for 100,000 hours.
- Replaces POL-22001 & 21005 (unalarmed)

Point Type	—	Power	Standard	—	Color	—	Mounting	—	Style
POL-21007		1: 96-250v AC 5: 10.8v DC to 52.8v DC	A: ICAO A B: ICAO B B: FAA -43H T: Trans. Canada		R: Red		34B: ¾-inch, Bottom 34L: ¾-inch, Unilet 10B: 1-inch, Bottom M20B: Metric M20 M25B: Metric M25		S: Single S3: Single & junction box D: Double

Power Consumption per Head:

Voltage	Amps	VA	Watts
120	0.057	6.0	2.5
220	0.035	7.1	2.5
12	0.108		1.3
24	0.054		1.3
48	0.031		1.5



- Option -P: FAA Photoelectric Control  
Adds a prewired FAA PEC to -S2.3 or double
- Option -BKTU: Universal bracket kit for POL
- Option -SF: Slipfitter 2.375-in stainless steel
- Option -UPS: Battery backup; see page 4
- Option -SOL: Solar Powered; see page 2 & 3
- Option -PM: Solar array post mount max 3.0-in OD

POL-21007-1x-R-34B-S3  
SINGLE OBSTRUCTION LIGHT  
WITH JUNCTION BOX



POL-21007-1x-R-34B-S  
SINGLE OBSTRUCTION LIGHT



POL-21007-1x-R-34B-D  
DOUBLE OBSTRUCTION LIGHT



### SOLAR POWERED POL-21007 OBSTRUCTION LIGHTS

Choose one of the catalog numbers below to receive the mounting arrangement displayed in the graphic or choose the All-In-One model on page 3.

The light will operate at night automatically year round anywhere the solar irradiance is greater than 1.0 kWh/m<sup>2</sup>/day (>1.2 for -D).

Important - All POL-SOL systems by definition include:

- POL-21007 fixture
- Option -BKTU wall-post bracket\*\* for the POL
- Option -CF cable fitting
- 3-meters SOW cable loop to the solar controller
- Solar array & solar controller with battery
- Floor-roof brackets\* for the solar array

\* Addition of option -PM changes to post brackets for the array & includes BKTU setup.

\*\* See page 5 for the POL bracket details.



POL-21007-5x-R-34B-D-SOL-PM



POL-21007-5x-R-34B-D-SOL



POL-21007-5x-R-34B-S3-SOL



POL-21007-5x-R-34B-S3-SOL-PM



POL-21007-5x-R-SOL-FP  
All-In-One Portable or Fixed  
Solar Powered Obstruction Light  
Ships complete as shown



Solar Insolation Value Required:

POL-SOL > 2.0

POL-SOLX > 1.2

Includes NVG compatibility

- FAA L-810 compliant to AC 150/5345-43H
- Autonomy is 7.3 days battery capacity without sun
- For any location in the world. See solar insolation chart below.
- Includes carry handle
- May be screwed down to a flat surface or clamped
- No switching required.  
Operates automatically all night & turns off in the morning

POL-21007-5x-R-SOL-PM  
SINGLE OBSTRUCTION LIGHT  
SOLAR POWERED  
WITH OPTION -PM POST MOUNT



POL-21007-5x-R-SOL  
SOLAR POWERED OBSTRUCTION LIGHT



### UNINTERRUPTIBLE POWER SUPPLY OPTION -UPS PL11609-1 UPS UNIT

Note: Add option -UPS for a one POL or purchase PL11609-1 to power multiple POL obstruction lights and/or PFB-37003 flashing red beacons. It may also be used for a standalone PFB-37004 white or dual red-white beacon.

Required: For one POL, add option -P. For multiple lights, add one PPC-40700-1-34T on the output (load side) of PL11609-1 UPS unit.

See chart below for estimated run-times.

Note: Intended for emergency use only; do not use for regularly scheduled shutdowns of power such as nights and weekends.

For use with a POC system controller, the POC must be 120V and the PL11609-1 must be installed on the power feed to the POC (i.e. upstream of the POC & PPC).

#### Features & Functions:

- Automatic operation upon loss of power & upon restoration of power.
- Automatic battery charging.
- AC power Input: 96-264V AC
- Temperature range: -20-deg C (-4-deg F) to +55-deg C (131-deg F)
- The UPS sends 120V AC to the load. Use universal AC or 120V lights.
- Battery low voltage disconnect to protect the battery.
- The output to the load has a true pure sine wave.
- NEMA 4X (IP66) fiberglass enclosure.
- Includes 2 x ¾-inch NPT hubs and 1 x ¾-inch cable gland.

RUN-TIME IN NUMBER OF NIGHTS (12 HOURS)

	0 POL	1 POL	2 POL	3 POL	4 POL	5 POL	6 POL
0 PFB		9.4	5.4	3.8	2.9	2.3	1.9
1 PFB	5.8	3.9	2.9	2.3	1.9	1.6	1.4
2 PFB	3.0	2.4	1.9	1.6	1.4	1.2	1.1
3 PFB	2.0	1.7	1.4	1.3	1.1	1.0	0.9
4 PFB	1.5	1.3	1.2	1.0	0.9	0.9	0.8

#### Notes on run-times and battery capacity:

- FAA photocontrol is required as either -P for one light or use PPC-40700-1-34T.
- Based on POL-21007-1B series. For POL-21005-1B, count each POL as a PFB-37003.
- Run-times are based on a 77-deg F (25-deg C) ambient temperature.
- Battery capacity will be between 65-85% at 0-deg C (32-deg F)
- Battery capacity will be between 25-45% at -20-deg C (-4-deg F)
- “POL” means POL-21007-1B-R number of operating heads.
- “PFB” means PFB-37003-R-1 flashing red beacon.



POL-21007-1x-R-34F-S3  
SINGLE OBSTRUCTION LIGHT  
WITH SIDE-WALL MOUNT JUNCTION BOX



POL-21007-1x-R-34B-D-P  
DOUBLE OBSTRUCTION LIGHT  
WITH PREWIRED FAA  
PHOTOELECTRIC CONTROL



POL-21007-1x-R-34B-S3-P  
SINGLE OBSTRUCTION LIGHT  
WITH JUNCTION BOX & PREWIRED  
FAA PHOTOELECTRIC CONTROL



POL-21007-1x-R-34B-S-SF  
SINGLE OBSTRUCTION LIGHT  
WITH 60MM SLIPFITTER  
FITS 2-3/8-INCH TENON



POL-21007 SINGLE & DOUBLE WITH OPTION -BKTU  
MAY BE WALL-MOUNTED OR POST-MOUNTED. THE POST MAY BE CONDUIT  
OR PIPE TO A MAXIMUM OUTSIDE DIAMETER OF 3-INCHES (76MM).  
THIS BRACKET IS INCLUDED IN ALL SOLAR POWER VERSIONS (-SOL)

POL-21007 SINGLE  
WITH -34L UNILET  
USE WITH -BKTU  
FOR TOWERS



FAA PHOTOELECTRIC CONTROLLER  
FOR A CIRCUIT OF POL'S  
PPC-40700-1-34T SEE FILE OL410



### WEIGHT & DIMENSIONS

	Weight		Height		Width		Depth	
	lb	kg	in	mm	in	mm	in	mm
POINTSPEC Single:	1.0	0.45	6.6	(169)	5.5	(140)	5.5	(140)
POINTSPEC Double:	6.2	2.8	12.2	(309)	15.8	(401)	5.5	(140)
Wind Loading:	Effective Projected Area (EPA) for POINTSPEC Lights							
	Double: 0.63 sq ft		Single (no box): 0.15 sq ft		Single (with box): 0.42 sq ft			



## POINT LIGHTING CORPORATION

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Fax 01 860.243.0665  
website: www.PointLighting.com



# POINT HELIPORT BEACON PHB LED IDENTIFICATION BEACON

Compliances: ETL Listed to UL 1598 & UL 1598A Marine Vessels, IP66 & IP67  
 ETL Listed to CSA C22.2 No.250.0-04 Canada  
 ETL Verified FAA L-864 to FAA Advisory Circular 150/5345-43H  
 Registered ISO 9001:2015  
 FAA Advisory Circular 150/5390-2B, para. 210.f, 310.h, 410.f.  
 ICAO Annex 14 Heliports, Volume II, para. 5.3.2. 1 to 5  
 ICAO Annex 14 Aerodromes, Volume I, para. 5.3.3.8 to 14  
 Army TM 5-811-5, para. 7-5.b. Station Identification  
 Transport Canada CAR 325.33 (option -M)  
 Class I, Zone 2, Groups IIA IIB+H2 IIC, T5 at ± 55° C (option -EX)  
 American Bureau of Shipping (ABS) Type Approved Product



The PHB LED medium intensity identification beacon is specified to mark the heliport or airport location. All castings are aluminum, all hardware is stainless steel and the lens is glass. There is no plastic. All exterior metal beacon parts are powdercoat painted aviation yellow for corrosion resistance that meets the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I.

Point Type	Color	Voltage	Options (see pages 2 & 3)
PHB-37002	W: White G: Green Y: Yellow R: Red	1: AC 3: DC 12 & 24V	H: Heliport 3-Color Flash Control HA: Heli/Airport 2-Color Flash Control M: Morse Code (ICAO) Flash Control MA: Morse Code with Alarms * C066: Brightness Control ** MT: Marine Treatment EX: Class I, Div 2, Groups A B C D, T5 NC: NVG Compatibility DP: Double Peak White (with -H or -HA) SOL: Solar Powered DC (with -M only)

PHB-37002-WGY-1-H



Intensity: 2,000 candelas option -H  
2,500 candelas option -M

Wattage: 51.1 watts Peak (AC) option -H & -HA  
30.0 watts Average (AC) option -H  
38.0 watts Average (AC) option -HA  
65.6 watts Peak (AC) option -M  
36.0 watts Average (AC) option -M & -MA

Volt-Amps: 104 VA (AC) option -M  
74 VA (AC) option -H/HA

Input Range: 96 to 264 volts AC; 50 or 60 Hz  
10.8 to 26.4 volts DC

LED avg. life: 100,000 hours

Temp Rating: ± 55° C

Dimensions: 12.1 (306) x 12.1 (306) x 9.8 (249) H  
Inches (mm)

Weight:: 20.2 lbs 9.2 kg

Mounting: 4 Holes on 10.5-inch circle

**\* FIELD PROGRAMMABLE**

A beacon with option -MA may be reprogrammed with a new message using our optional handheld device.

**\*\* BRIGHTNESS CONTROL**

3-step brightness control by selecting option -C066. Has a separate control unit and requires option -MA.

**FEATURES**

- Over voltage & over current protection
- Short circuit & open circuit protection
- Metal oxide varistor surge protection
- No external plastic parts
- Factory sealed





**POINT  
LIGHTING**  
CORPORATION

**POINT HELIPORT BEACON  
PHB LED  
ICAO IDENTIFICATION BEACON  
MORSE CODE BEACON**

Compliances: ETL Listed to UL 1598 & UL 1598A Marine Vessels & IP66  
ETL Listed to CSA C22.2 No.250.0-04 Canada  
Registered ISO 9001:2015



ICAO Annex 14 Heliports, Volume II, para. 5.3.2. 1 to 5  
Transport Canada CAR 325.33 (option -M)  
Class I, Division 2, Groups A B C D, T5 at ± 55° C (option -EX)  
Class I, Zone 2, Groups IIA IIB+H2 IIC, T5 at ± 55° C (option -EX)  
IECEX Listed: Ex db eb op is IIB T6 Gb Ta -40 to +55-deg C, IP66 & IP67  
ATEX Listed: Ex II 2 G Ex db eb op is IIB T6 Gb Ta -40 to +55-deg C, IP66 & IP67

The PHB LED ICAO identification beacon is specified to mark the heliport or airport location by emitting a flashing Morse code signal. The standard signal is a Morse code "H", but the factory can program any signal such as site identifier or radio frequency number. Available in white or green light output.

**BRIGHTNESS CONTROL:** The PHB with option -M for Morse code is available with 3-step brightness control (30-60-100%) by adding option -C066.

**OPTION -EX:** Class I, Division 2 (Zone 2) listed.

**OPTION -AX:** ATEX & IECEX Zones 1& 2 listed. Requires option -MA.

**OPTION -M:** ICAO Identification Beacon

The Morse code beacon shall comply with ICAO Annex 14, Volume II, paragraph 5.3.2 and Transport Canada CAR 325.33. The basic unit shall flash message "H" unless the user specifies a different message to be factory programmed. The peak beam in white shall be 2,500 candelas. For the ICAO aerodrome identification beacon, the light output color is green and specify the code message.

**OPTION -C066:** Brightness Control

With required option -MA, this option adds a separate control unit in a NEMA 4X (IP66) wall-mounted enclosure to produce three (3) brightness steps at 100% - 60% - 30% of normal. An ON-OFF-AUTO switch on the door may be used with an FAA photoelectric controller (PPC ordered separately) when set in the AUTO position.

Note: Not available for two and three color PHB beacons.

**OPTION -NC:** Night Vision Goggle (NVG) Compatibility

The beacon shall be "visible" to pilots wearing NVG by adding infrared LEDs. Single wavelength colored LEDs are not within the wavelength range of most NVG.

**OPTION -MA:** ICAO Identification Beacon with Alarm Monitoring

In addition to the features of option -M, the Morse code beacon shall have a line powered alarm line for LED array failure alarm and flasher failure alarm. The beacon message may be reprogrammed using our optional handheld device PL11248-MA.

**OPTION -SOL:** Solar Powered ICAO Identification Beacon

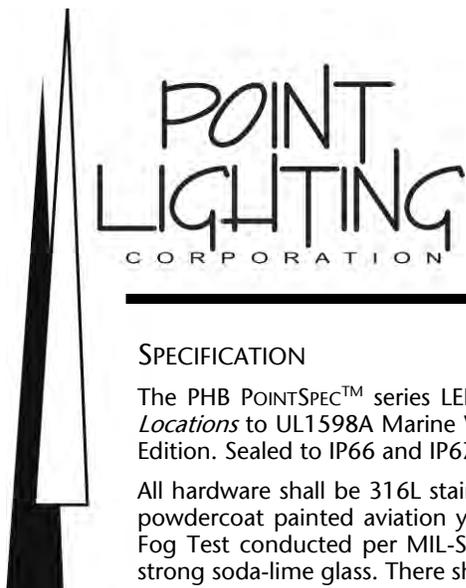
Order as PHB-37002-W-3-M-SOL for automatic operation with solar power package included.

Handheld Programmer  
PL11248-MA

Required for changing the Morse code message in the field.



PHB-37002-W-1-MA-C066-MT-NC  
ICAO MORSE CODE IDENTIFICATION BEACON  
with Brightness Control (control  
Marine Treatment & NVG Compatibility)



# POINT HELIPORT BEACON PHB LED IDENTIFICATION BEACON

## SPECIFICATION

The PHB POINTSPEC™ series LED heliport identification beacon shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels, UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-04, 2nd Edition. Sealed to IP66 and IP67 ingress protection.

All hardware shall be 316L stainless steel. All exterior copper-free aluminum cast beacon parts shall be powdercoat painted aviation yellow for corrosion resistance that meets the US Military Standard Salt Fog Test conducted per MIL-STD-810E, Method 509.4, Procedure I. The clear lens shall be made of strong soda-lime glass. There shall be no plastics used in the structural construction of the beacon.

### OPTION –M:

The Morse code beacon shall comply with ICAO Annex 14, Volume II, paragraph 5.3.2 and Transport Canada CAR 325.33. The basic unit shall flash message “H” unless the user specifies a different message to be factory programmed. The peak beam in white shall be 2,500 candelas. For the ICAO aerodrome identification beacon, the light output color is green and specify the code message.

### OPTION –MA:

In addition to the features of option –M, the Morse code beacon shall have a line powered alarm line for LED array failure alarm and flasher failure alarm. The beacon message may be reprogrammed using our optional handheld device PL11248-MA.

### OPTION –H:

The 3-color heliport beacon shall flash alternately white (clear), yellow, green at the FAA specified flash rate of 36 flashes per minute. The beacon is low intensity at 2,500 candelas in white intended for use at privately owned heliports where an optional visual aid is desired to enhance marking the heliport site location as noted in FAA Advisory Circular 150/5390-2B, paragraph 210.f (2004).

Flash rate: 36 per minute    Each color flashes 12 times per minute

### OPTION –HA:

The 2-color heliport beacon shall flash alternately white (clear) and green or yellow at the FAA specified flash rate of 24 flashes per minute. The beacon is low intensity at 2,500 candelas in white intended for use at privately owned airports and heliports where an optional visual aid is desired to enhance marking the site location.

Flash rate: 24 per minute    Each color flashes 12 times per minute

### OPTION –DP:

The flash of the white (clear) LEDs shall be double-peaked (meaning a double flash) as appears in US Military specifications. Requires –H or –HA.

### OPTION –MT:

The beacon shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.





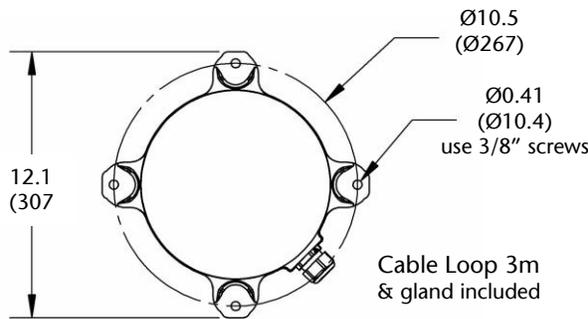
# POINT LIGHTING CORPORATION

## POINT HELIPORT BEACON PHB LED IDENTIFICATION BEACON

### SERVICE

The beacon is permanently sealed. Do not attempt to open the beacon.  
Do not attempt any testing or procedure not stated in the manual.

### MOUNTING FOOTPRINT

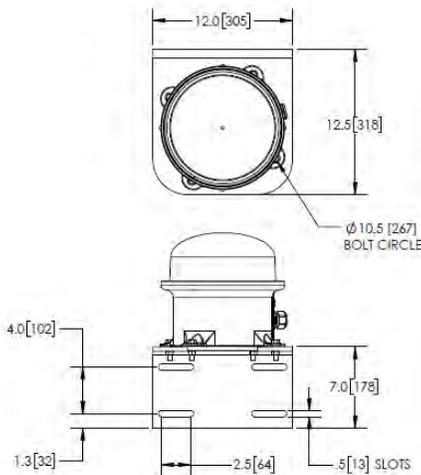


### BEACON CABLE LOOP

Length: Three (3) meters  
Type: SOW 600-volt  
Wires: Three (3) each #14 AWG

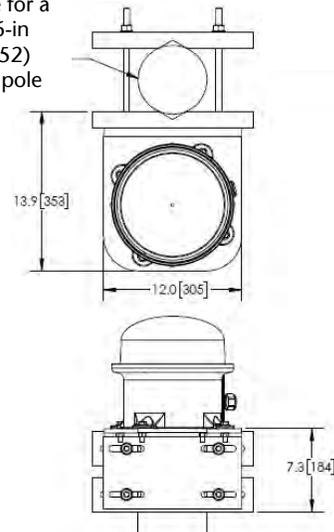
Dimensions: Inches (mm)

### Bracket PL11215 For Wall Mounting



### Bracket PL11215-TPM Tower-Pole Mounting

Adjustable for a 3-in to 6-in (76 to 152) diameter pole



Anodized Aluminum  
Includes Stainless Steel  
Beacon Mounting Hardware



## POINT LIGHTING CORPORATION

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