



# BATTERY BACKUP SYSTEM BBS — 3 NIGHTS POL LED OBSTRUCTION LIGHTS

Compliances: ETL Listed POL to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed POL to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Verified FAA L-810 to FAA AC 150/5345-43G 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)

The POL POINTSPEC series of red LED aviation obstruction lights are used to mark tall structures that present hazards to air navigation. At night, these lights warn pilots when installed in accordance with FAA AC 70/7460-1 and applicable FCC and ICAO rules. The PPC photoelectric controller provides automatic activation at dusk in accordance with FAA specifications.

Accepts all commercial AC power between 90V and 260V. Upon failure of the AC power, the BBS switches to battery power for up to three nights unattended. Automatic battery charging under normal AC power. The BBS operating time is based on POL-21005 and POL-22001. The POL's selected must be 12 VDC and an FAA Photoelectric Controller type PPC-40003-34T must be ordered.

Choose the POL-21005 model from catalog file OL190POLv5 Note: Must be a -3F or -3B array  
 BBS-60500 may be used with up to four (4) operating POL-3F heads or two (2) POL-3B heads.

Or choose the Tower Series POL-22001 model from file OL189POL Note: Must be a -3F array

BBS-60500-(serial number)	BBS Battery & Control Unit	NEMA 4
BBS-60500-SS-(serial number)	BBS Battery & Control Unit	NEMA 4X SS
BBS-60500-EX-(serial number)	BBS Battery & Control Unit	Class I, Division 2



POL-21005-3F-R-S3-MT  
With green Marine Treatment

POL-21005 &  
POL-22001  
Emit red when ON



POL-21005-3F-R-34B-DT  
Add one PPC photoelectric control



Minimum Wire Size Chart

Circuit Run Length	Operating Heads		
	One (1)	Two (2)	Three (3)
100-ft	#16 AWG	#16 AWG	#16 AWG
200-ft	#16 AWG	#16 AWG	#14 AWG



# BATTERY BACKUP SYSTEM

## BBS — 3 NIGHTS

### POL LED OBSTRUCTION LIGHTS

#### SPECIFICATIONS

#### POL LED OBSTRUCTION LIGHT(S) & BATTERY BACKUP SYSTEM

The red LED lighted aviation obstruction light shall fully comply with (specify: FAA L-810 & ICAO type B or ICAO type A). The obstruction light(s) shall operate on commercial AC power and, upon failure of the commercial power, shall transfer automatically to a backup battery power supply with the capacity to operate the light normally for three (3) nights before resumption of the AC power. In both modes, the obstruction light shall be switched on at night and off during the day at the FAA specified light levels by an FAA photoelectric controller prewired to the light fixture.

The BBS operating time is based on one to four operating -3F heads or one to two operating -3B heads.

The BBS unit operates on normal commercial power and shall accept a universal input line voltage that may vary within the range of 90 VAC to 260 VAC. Within the preceding ranges, the output shall be converted from AC to a controlled, stabilized 12 VDC to the POL light(s). All light fixture leads shall be clearly tagged for connection to the BBS Battery & Control Unit.

The fixture 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 shall be aviation yellow treated for corrosion resistance and 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. It shall be certified by the manufacturer to comply with the US Military Standard level II Salt Fog Test.

Important! The POL's selected must be a 12 VDC and an FAA Photoelectric Controller type PPC-40003-34T must ordered.

The clear lens shall be strong soda lime glass and permit full light transmission. The lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow.

The red emitting LED's shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's 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 LED's shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LED's that can be bent out of position shall be unacceptable and cause for rejection. 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 (MOV's). There shall be a clear design element for the dissipation of LED heat to insure the LED's do not fail prematurely.

Battery charging is to be automatic and included in the POL BBS Battery & Control Unit. All components shall tolerate the above specified universal voltage range. Wiring from the unit to the fixture shall be provided by others.

The enclosure shall be wall-mounted steel industrial grade rated NEMA 4 watertight and NEMA 12 dust tight. The unit shall contain the deep cycle rechargeable battery, 12 VDC power supply and automatic charger.

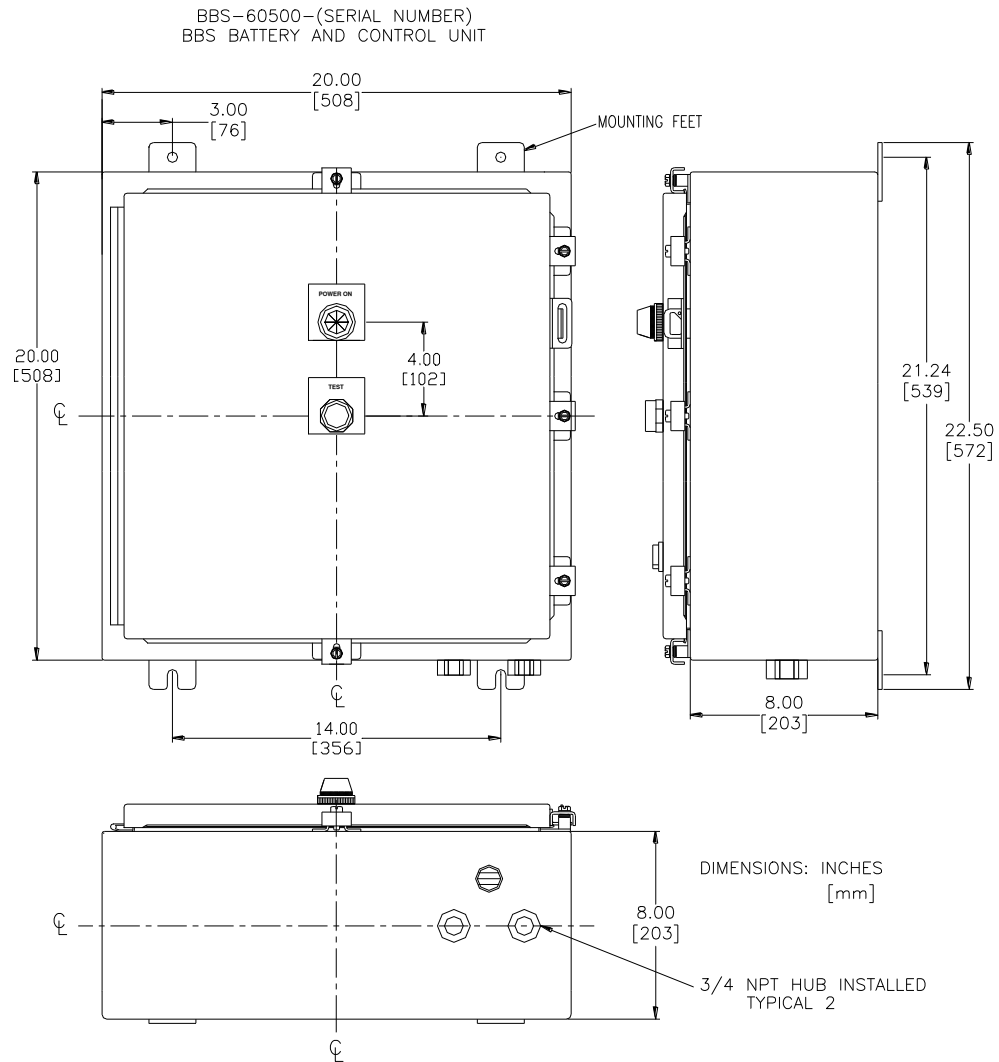
There shall be a momentary push-to-test switch on the door. There is no loss of power alarm as loss of commercial power is apparent. There shall be a door mounted green Power On pilot light meaning the commercial AC power is present at the unit and this light will go out when the system is operating on battery backup after loss of AC power. Alarm functions, if any, based on the POL model selected shall operate in both AC and battery modes.

The POL Battery Backup System shall consist of one to four POL-21005-3F-R-34B-xx operating heads with one BBS-60500 Battery & Control Unit and one PPC-40003-34T manufactured by Point Lighting Corporation.

Includes our yellow Marine Treatment finish of the POL as standard at no additional charge which tolerates marine, high salt content air and other corrosive environments.

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.*

Option -MT for green Marine Treatment is available.



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