SOLAR LIGHTING

SWCS

Solar LED Primary and Supplemental Wind Cones

NON-FRANGIBLE AND FRANGIBLE

L-806 Wind Cone

L-807 Wind Cone

Compliance with Standards

FAA: L-806(L) and L-807(L) AC 150/5345-27 (Current Edition) and the FAA Engineering Brief No. 67. ETL Certified.

Uses

FAA L-806(L)
Provides visual surface wind direction and velocity information to pilots in flight or on the ground at airports and heliports

FAA L-807(L)
Provides visual surface wind direction and velocity information to pilots in flight or on the ground at airports and heliports

Features

- Available externally lighted, internally lighted, or unlighted
- LED lamps with the following features:
  - 50,000 to 100,000 hour lamp life, virtually maintenance free
  - Multiple lamp circuits for improved reliability
  - 80-90% less power consumption than halogen lamps
  - A long-life LED obstruction light
  - Integral power adapter on series circuit models
- One piece welded aluminum basket with pre-installed bearings
- Raincaps protect the bearings from weather
- The nylon sock is treated for rot, mildew, and water repellency
- Powder coat painted international orange
- Made in the USA and ETL Certified by Hali-Brite, Inc., Crosby, MN.

For WCS806 solar wind cones:

- Size 1 (18" dia. × 8' long) wind sock
- 1.9 inch diameter steel pole with frangible coupling at base
- May be mounted directly to an L-867 light base, 2 inch NPT baseplate (sold separately)

For WCS807 solar wind cones:

- Size 1 (18" dia. × 8' long) or Size 2 (36" dia. × 12' long) wind socks
- The pole is center-hinged with 4" diameter steel on the bottom and 3" diameter steel on the top
- A center-mounted braked winch allows 1-person maintenance.
- The four anchor bolts are a one-piece welded assembly, ready to drop in the ground
- Provides power to Hali-Brite® ETL-certified wind cones with L-810 obstruction lights (12 VDC LED models)
- Custom designed for the installation site, using 30-year worst case insolation and temperature extremes
- Operates the wind cone lamp dusk-dawn, controlled by an ETL-certified photocell, to FAA illumination requirements
- Full wind cone lamp intensity at all times when operating
- 50 or 135 watt solar panel, with 12-year/90% and 25- year/80% power warranty
- MPPT charge controller, with custom-programmed temperature compensation
- On-board indicators for battery, charging and system status
- 100 to 300 A-H AGM battery, designed for 4000 charge/discharge cycles
- 10-day nominal battery autonomy
- Dual-post mount, with frangible couplings, designed to withstand ASCE Exposure C wind loads
- Temperature range: -45 to +55 °C (-49 to +131 °F)
- Includes pre-assembled anchor for easy mounting
- Weather and corrosion resistant construction of powder- coated steel and aluminum
- Solar panel tilts 25-65 degrees in 10 degree steps, factory preset for the installation location
- Manufactured in the USA

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Operation

The operation of the wind cone is entirely dependent on the direction and relative velocity of the surface wind. Movement of the wind through the open throat of the cage and into the sock causes the tail to inflate. The tail of the inflated sock indicates true wind direction for velocities as low as three knots through a 360° circle about the vertical shaft.

Wind Cone Selection Chart

Product Number	FAA Size	FAA Style	Power Source	Lamp Type	Fixture VA[1,2]	Fixture Watts	Weight (lb)	Replacement Lamp
L806-S1-EX-12-ON-5	1	I-A External	11.5-13 VDC	LED	6	6	57	9200-0033
L806-S1-IN-12-ON-5 [3]	1	I-B Internal	11.5-13 VDC	LED	6	6	57	9200-0041
L807-S1-EX-12-ON-5	1	I-A External	11.5-13 VDC	LED	6	6	197	9200-0033
L807-S1-IN-12-ON-5 [3]	1	I-B Internal	11.5-13 VDC	LED	6	6	197	9200-0041
L807-S2-EX-12-ON-5	2	I-A External	11.5-13 VDC	LED	10	10	210	9200-0036
L807-S2-IN-12-ON-5 [3]	2	I-B Internal	11.5-13 VDC	LED	10	10	219	9200-0042

Notes

[1] Power consumption specifications include the L-810 obstruction light.
[2] Isolation transformer VA loss not included.
[3] This FAA Style is not ETL certified

FAA Wind Cone Classifications

External LED Light

Internal LED Light

Size 1:	8 foot
Size 2:	12 foot
Style I-A:	Externally Lighted
Style I-B:	Internally Lighted
Style II:	Unlighted

Solar Power Supply

The Solar Power Supply (SPS) is a self-contained photovoltaic power source for the WCS806 and WCS807 Solar Wind Cones.

SPS Ordering Information

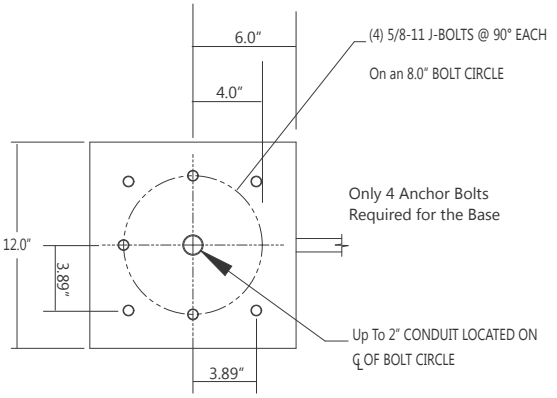
The SPS is designed for operation only with Hali-Brite® Wind Cones. Each SPS is custom configured for the proper solar panel, battery, temperature compensation and height for the installation location. Please contact ADB Safegate to configure the correct model for your location.

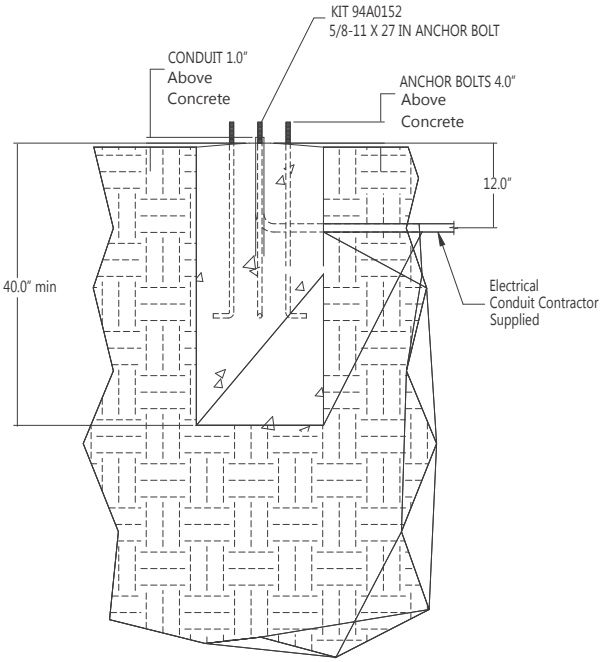
Shipping Information

Unpackaged Weight:	186-268 pounds
Shipping Weight:	266-388 pounds
Shipping Volume:	72"L × 48"W × 44"H

Installation Information

Full solar exposure is critical to the proper operation of the SPS. The solar panel must face due South (in the Northern Hemisphere). Any shading of the solar panel will significanty reduce the energy production. The bottom edge of the solar panel must not be obstructed by snow or vegetation. To prevent shading from the wind sock, the SPS must be installed at least 8 feet from an L-806 wind cone, and at least 12 feet from an L-807 Size 2 wind cone. The SPS is attached to a 4-bolt anchor assembly (included), mounted in a concrete slab. Power is supplied to the wind cone by a cable in liquid-tight conduit through one of the SPS mounting legs.





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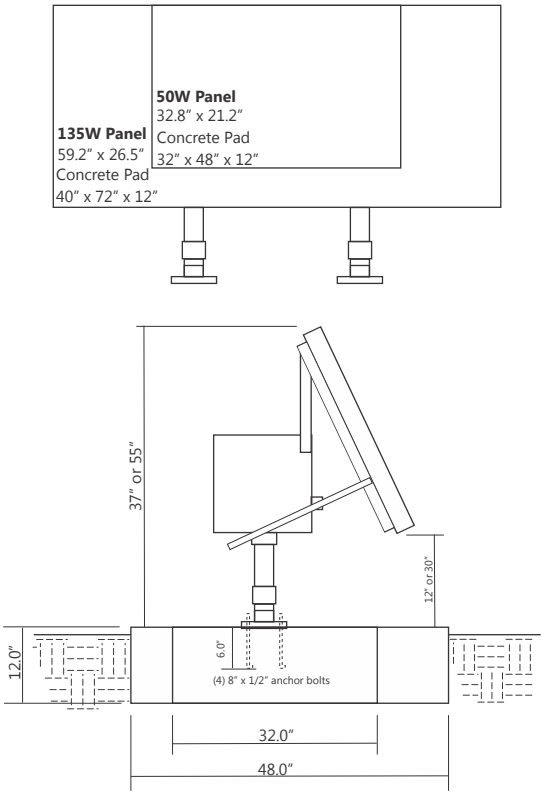
Dimensions



Solar Power Assembly on a Concrete Pad