

FAA L-806 & L-806(L) WC Series Frangible Wind Cones

Compliance and Applications

- ETL Certified L-806 & L-806(L): FAA AC 150/5345-27F

L-806 wind cones provide visual indication of wind direction and velocity for pilots on small airfields, heliports, vertiports and as supplemental wind indicators near runway touchdown areas on larger airfields.

Features

- Perfect for small airports, heliports and vertiports
- Pre-assembled bearings and one-piece welded aluminum basket, and center hinged pole for easy installation
- Mounting options include: roof, wall, floor flange, 2" NPT conduit or L-867 base plate (sold separately)
- Available externally lighted, internally lighted, or unlighted
- 50,000 to 100,000 hour LED lamp life, virtually maintenance free
- LED lamps consume 80-90% less power than halogen lamps
- Night Vision Goggle (NVG) compatible obstruction light
- Solar Power Supply Option available; no more long underground wire and conduit installations
- Wind sock included, Size 1 (18" diameter x 8' long) sock (berry compliant) treated for rot, mildew, and water repellent
- Marine Treated Option (recommended for installations within 100 miles of saltwater) available for increased useful life in corrosive environments
- Powder coat painted international orange
- 4 year warranty on LED lamps, 2 year warranty on wind cone
- Designed to operate at any ambient temperature between -67°F (-55°C) and +131°F (+55°C)
- Designed to withstand winds up to 75 knots (86 mph or 140 km/hr)
- Windsack moves freely about the vertical shaft it is attached to when subjected to wind of 3 knots (3.5 mph or 5.6 km/hr) or more and indicates the true wind direction within $\pm 5^\circ$
- Windsack extends fully when subjected to wind of 15 knots (17.8 mph or 28.7 km/hr)



External LED Light



Internal LED Light



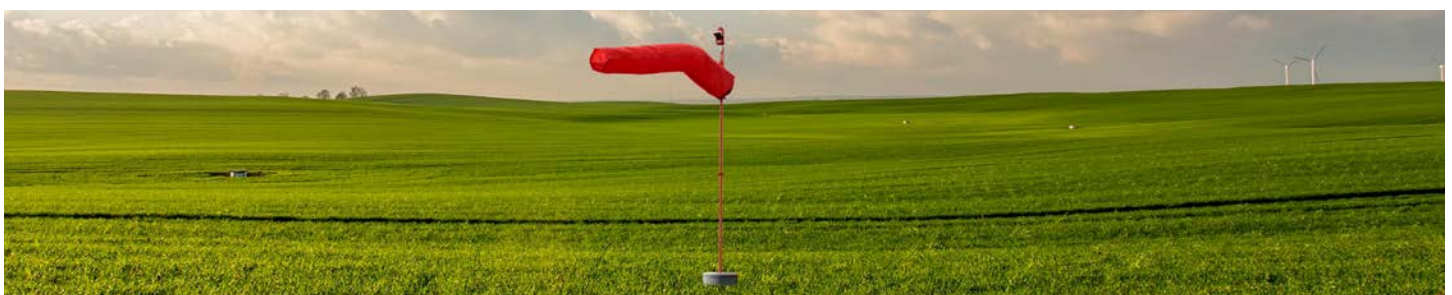
Solar Power Supply (SPS) Option

A self-contained photovoltaic power source is now available for WC Series wind cones (see page 6 for details).



Marine Treated Option

Recommended for high salt and other corrosive environments. Includes: marine treated powder coat, stainless steel bearings/hardware.



Ordering Codes¹

FAA Type	FAA Style	Power Source	Options
WC-806-1-	EX: Externally Lighted IN: Internally Lighted UN: Unlighted	120: 120 VAC 230: 230 VAC ² 66A: 6.6 A ³ 12: 12 VDC ⁴ NON: None (unlighted)	MT: Marine Treated AP: Aluminum Pole ² RW: Red/White Steel Pole & Sock WM: Wall Mount (rigid pole) ² RM: Roof Mount (rigid pole) ²

¹ Wind cone includes frangible coupling, powder-coated orange steel pole, Size 1 orange wind sock, and obstruction light. Floor flange not included (WC-1067-0002). Typical lead time: ~3 weeks ARO.

² 230 VAC, Aluminum Pole, Wall Mount, and Roof Mount configurations are not ETL certified.

³ 6.6A configuration requires 100 watt L-830 transformer (sold separately).

⁴ 12 VDC configuration designed for use with Solar Power Supply or 12 VDC driver (sold separately).

Specifications

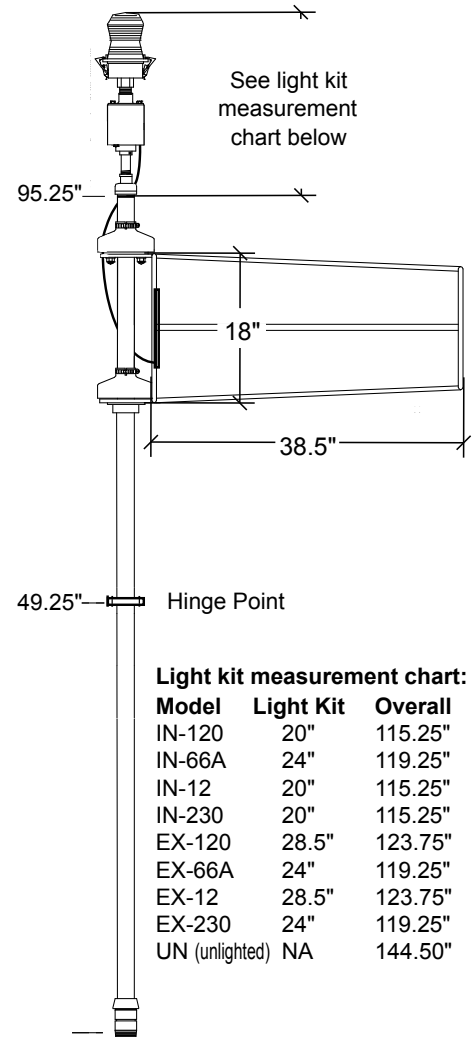
Catalog Number	FAA Size	FAA Style	Power Source	Fixture VA	Fixture Watts	Weight (lb.)	Replacement Lamp
UNLIGHTED							
WC-806-1-UN-NON	1	II Unlighted	None	0	0	45	None
EXTERNALLY LIGHTED							
WC-806-1-EX-120	1	I-A External	108-132 VAC	15	14	58	9200-0032
WC-806-1-EX-230	1	I-A External	207-253 VAC	15	14	58	9200-0044
WC-806-1-EX-66A	1	I-A External	2.8-6.6 AMP	58	52	57	9200-0034
WC-806-1-EX-12	1	I-A External	11.5-13 VDC	6	6	57	9200-0033
INTERNALLY LIGHTED							
WC-806-1-IN-120	1	I-B Internal	108-132 VAC	32	19	59	9200-0038
WC-806-1-IN-230	1	I-B Internal	198-265 VAC	40	21	59	9200-0045
WC-806-1-IN-66A	1	I-B Internal	2.8-6.6 AMP	72	65	57	9200-0039
WC-806-1-IN-12	1	I-B Internal	11.5-13 VDC	6	6	57	9200-0041

Power consumption specifications include the L-810 obstruction light.

Accessories

Part Number	Description
WC-1800-0025	Frangible Coupling (one included with every L-806 wind cone)
WC-1067-0002	Floor Flange Mount (for mounting to foundation, anchors not supplied)
WS-AS1896	Spare Size 1 Wind Sock (18" dia. x 8'), Orange
WC-806-SP	Steel Pole (hinges in center of pole)
WC-806-AP	Aluminum Pole (hinges in center of pole)
WC-806-WM	Pole Wall Mount (must be secured directly to framing member capable of supporting the wind cone, fasteners not supplied)
WC-806-RM	Pole Roof Mount (must be secured directly to framing member capable of supporting the wind cone, fasteners not supplied)
WC-806-AC	Anchor Cage (welded square assembly for embedding in concrete footing, fits floor flange mount)
WC-1049-0014	Hinge Plate (custom built to existing foundation bolt pattern)
WC-SPS*	Solar Power Supply for 12V wind cone models (see page 6 for details)

* Each SPS is custom configured for the proper solar panel, battery, temperature compensation and height for the installation location. Please contact Flight Light to configure the correct model for your location.



Light kit measurement chart:

Model	Light Kit	Overall
IN-120	20"	115.25"
IN-66A	24"	119.25"
IN-12	20"	115.25"
IN-230	20"	115.25"
EX-120	28.5"	123.75"
EX-66A	24"	119.25"
EX-12	28.5"	123.75"
EX-230	24"	119.25"
UN (unlighted)	NA	144.50"

Shipping Information

- Unpackaged Weight: 45-59 lb.
- Hinged Pole Palletized Volume: 48"x48"x27, 160 lb. (fully crated option 226 lb.)
- L-806 with Solar Power Supply Palletized Volume: 96"x48"x40", 525 lb. (fully crated option 685 lb.)



Included Frangible Coupling



Optional Floor Flange Mount



Optional Spare Size 1 Windsock



Optional Hinge Plate



Optional Roof Mount



Optional Wall Mount



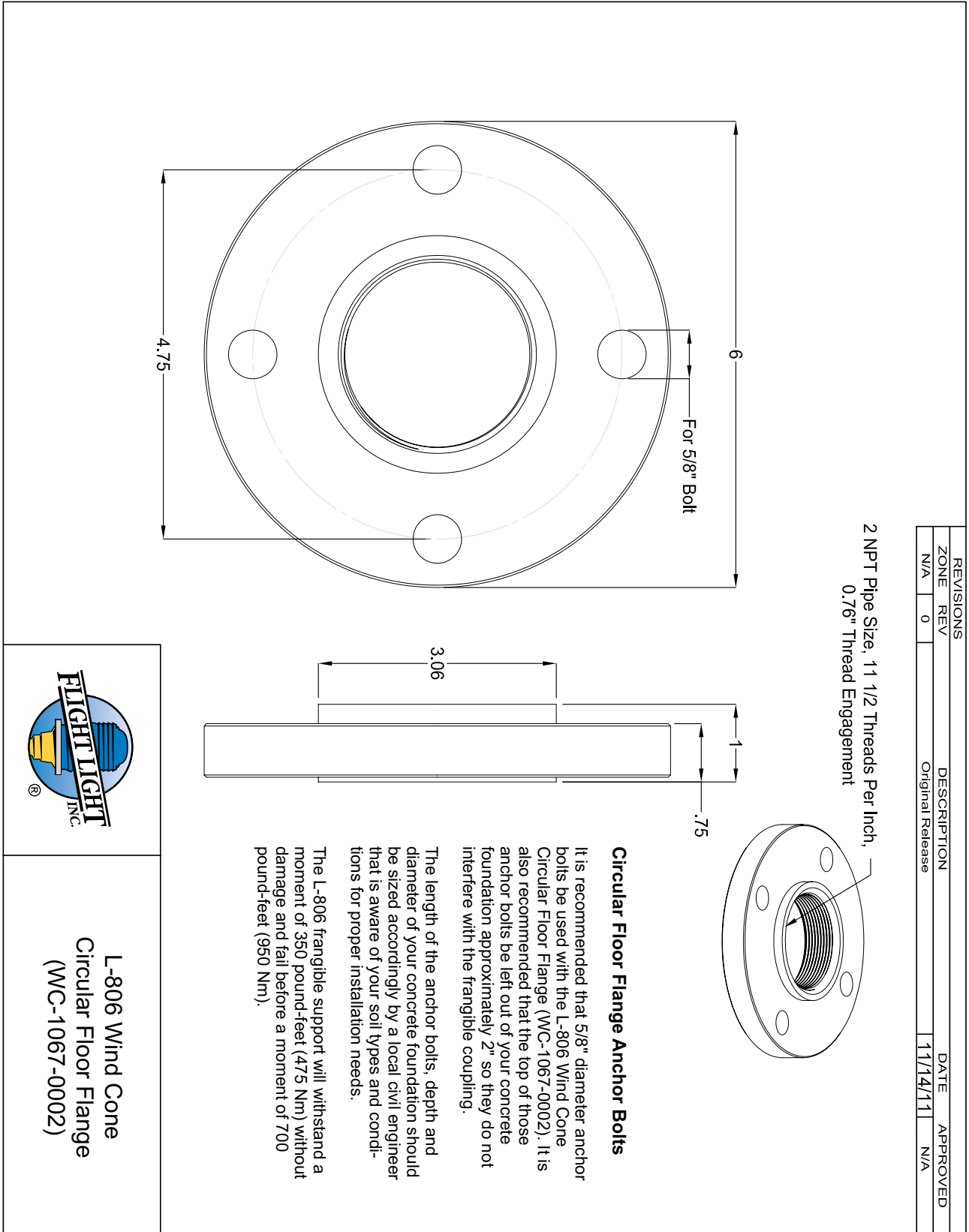
Pole Color Options: Orange (standard) or Red/White.



Optional Anchor Cage



Optional Solar Power Supply



REVISIONS		DESCRIPTION	DATE	APPROVED
ZONE	REV	Original Release	11/14/11	N/A
N/A	0			

2 NPT Pipe Size, 1 1/2 Threads Per Inch,
0.76" Thread Engagement

Circular Floor Flange Anchor Bolts

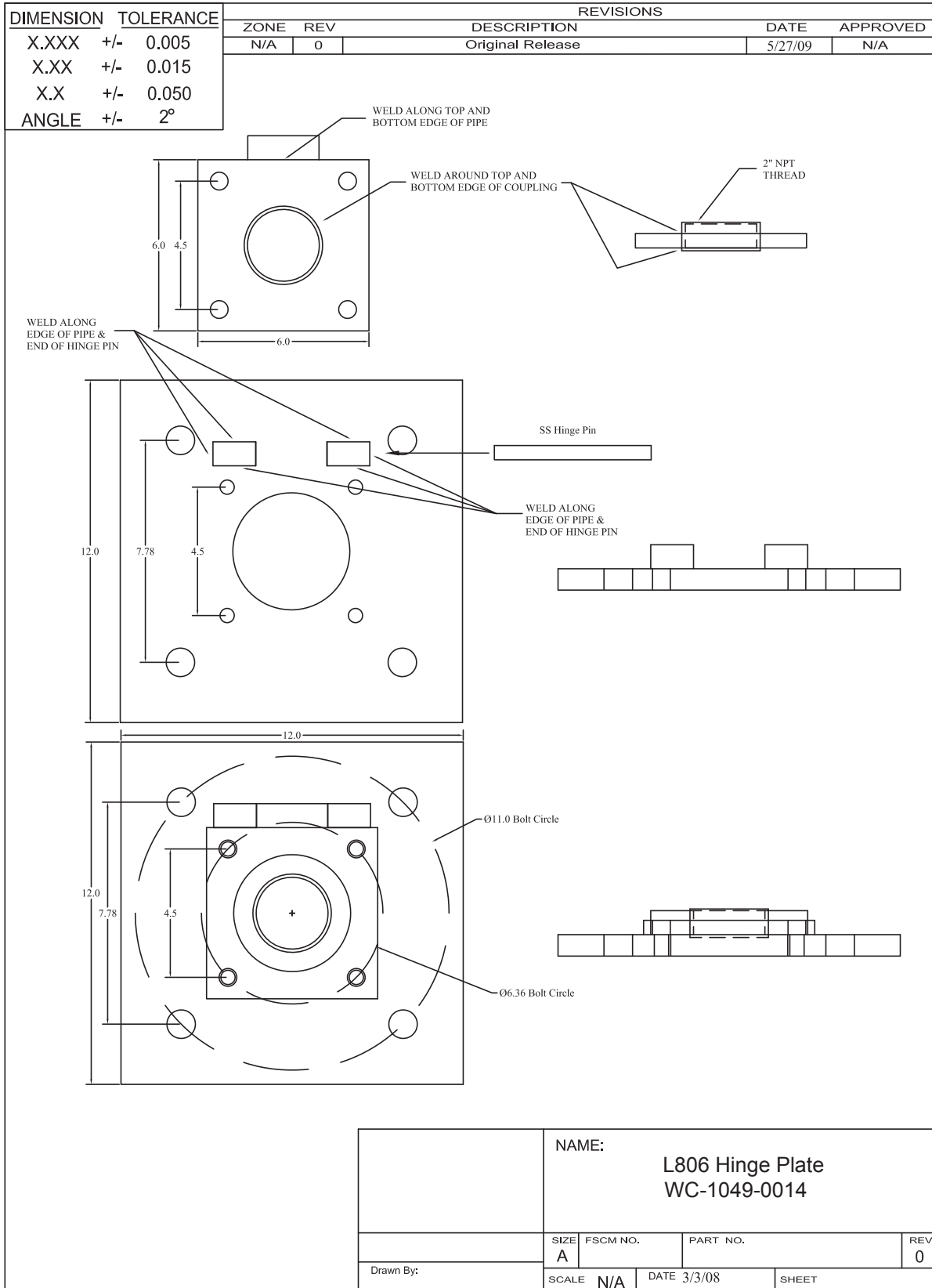
It is recommended that 5/8" diameter anchor bolts be used with the L-806 Wind Cone Circular Floor Flange (WC-1067-0002). It is also recommended that the top of those anchor bolts be left out of your concrete foundation approximately 2" so they do not interfere with the frangible coupling.

The length of the anchor bolts, depth and diameter of your concrete foundation should be sized accordingly by a local civil engineer that is aware of your soil types and conditions for proper installation needs.

The L-806 frangible support will withstand a moment of 350 pound-feet (475 Nm) without damage and fail before a moment of 700 pound-feet (950 Nm).



L-806 Wind Cone
Circular Floor Flange
(WC-1067-0002)



WC Series Wind Cone Solar Power Supply

Applications

The Solar Power Supply (SPS) is a self-contained photovoltaic power source for the WC Series L-806 and L-807 wind cones.

Features

- Eliminates expensive underground trenching and wire installations for wind cones
- Easy installation: pre-set solar angle, pre-assembled anchor for easy mounting
- Fully sunlight powered, zero energy cost operation
- 10 day nominal battery autonomy
- Long life premium AGM solar batteries (5-10 years expectancy)
- 100 to 300 A-H AGM battery, designed for 4000 charge/discharge cycles
- 100 or 200 watt solar panel, with 12-year/90% and 25-year/80% power warranty
- Custom designed for the installation site, using 30-year worst case insolation and temperature extremes
- Insulated battery compartment to preserve battery life
- MPPT charge controller, with custom-programmed temperature compensation
- On-board indicators for battery, charging and system status
- Dual-post mount, with frangible couplings, designed to withstand ASCE Exposure C wind loads
- Temperature range: -49 to +131 °F (-45 to +55 °C)
- Marine treated option available for corrosive environments (upgrades enclosure to aluminum, stainless hardware throughout, marine treated powder coat)
- Manufactured in the USA

Installation Information

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.

Ordering Information

Product	Description
WC-SPS-100-2-12	100 Watt Panel, 2 Batteries, 12" Legs
WC-SPS-100-2-30	100 Watt Panel, 2 Batteries, 30" Legs
WC-SPS-200-2-12	200 Watt Panel, 2 Batteries, 12" Legs
WC-SPS-200-2-30	200 Watt Panel, 2 Batteries, 30" Legs
WC-SPS MARINE	Marine treated option for installations within 100 miles of the sea. Aluminum enclosure, marine treated powder coat, stainless steel hardware throughout.

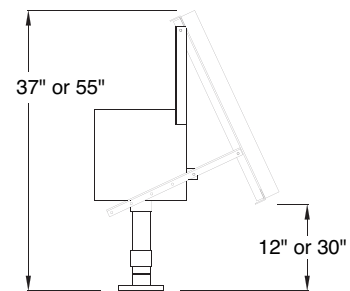
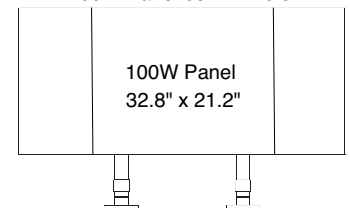
NOTE: Each SPS is custom configured for the proper solar panel, battery, temperature compensation and height for the installation location. Please contact Flight Light to configure the correct model for your location.



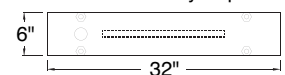
WC-SPS



200W Panel 59.2" x 26.5"



Anchor Assembly Top View



Replacement Parts

Part #	Description
WC-7800-0004	Solar Panel, 100 Watt
WC-7800-0005	Solar Panel, 200 Watt
WC-1300-0081	Battery, PVX-840T
WC-4500-0020	Charge Controller
WC-7800-0006	Photocell
WC-1800-0036	Frangible Coupling
WC-2300-0024	Fuse, 10A 32V

Shipping Information

- Unpackaged Weight: 186-268 lb.
 - Shipping Weight: 266-388 lb.
 - International Shipping Weight: 466-588 lb.
 - Shipping Volume: 60" L x 40" W x 44" H
- Can be shipped with wind cone in same crate.