Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

AVL-HAL-SOL-L810-LED-V1-30C

10W Solar LED Strobe Light - 30Hz Strobing Rate, Red - 40aH Battery Pack - FAA Compliant

Product ID: 221973

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

AVL-HAL-SOL-L810-LED-V1-30C FAA Compliant Solar-powered LED Strobe Light

Solar Panel Specs

Operation: Day/Night
Panel Dimensions: 14.3"-W x 27.89"-L x 3.19"-D
Weight: 15 lbs
Ambient Temp: -45°C to +55°C
Runtime: 36 Hours (w/o Sunlight); 3 Full Evenings (w/o Light)
Charging Time: 5 Hours
Battery: (1) 40aH Lithium-ion Battery Pack
Mounting: Surface or Pole
Wiring: 10` 16/2 SOOW

LED Strobe Light Specs

Lamp Type: A19 LED
Lamp Dimensions: 5.94"-Diameter, 9.6" Height
Weight: 3 lbs
Voltage: 12VDC or 24VDC
Total Watts: 10W
Lumens: 1,050
Lamp Life: 50,000+ Hours
Luminous Efficacy: 105 Lm/W
Lamp Color: Red (Lens/Globe)
Color Rendering Index: >80 CRI
Beam Spread: 20° Vertical; 360° Horizontal

Ratings/Approvals

FAA AC 150/5345-43
FAA Compliant
Listed for United States and Canada
Class I, Division 2 Groups A,B,C,D
Class I, Zone 2 Groups IIC,IIB,IIA
Class II, Division 2 Groups F,G
IP66
NEMA 3, 4, 4X
UL 844 Hazardous Locations
UL 1598 Luminaries
UL1598A Marine Luminaries
CSA C22.2 No. 137 Hazardous Locations
UL 94-V-0 Flame Retardant
USCG Accepted
ABS Type Approved
150 MPH Wind Tolerance (Light)
Exposure to 130°F (4+ Hours)
UV Radiation Resistant
Salt Fog Environment (Mil-spec Salt Fog Test)

Lighting Configuration: Strobe

Strobe Rate: 30 Hz

Power Efficiency: >95%

Power Factor: 0.992
Amp Draw: 0.84A @ 12V, 0.42A @ 24V
Ambient Operating Temp Range: -50° C to +85°C
Operating Temp Rating: T2D
Relative Humidity: 95%

Housing Material: Polycarbonate

Lens Material: Hardened Borosilicate Glass

Mounting: Surface/Ceiling/Wall

Mounting Hub: (1) 3/4" NPT Hub

System Specs

Master/Slave Configuration: Up to 100 Slave Fixtures per Master
Sync Controls: Master; to 1/60 Second
Master/Slave Selection: Dip Switch
Sensor Type: Day/Night
Sensor Activation: 35fc (Minimum)
Sensor Deactivation: 60fc (Maximum)
Sensor Configuration: Remote Installation
Sensor Wiring: 30` Between Sensor and Panel

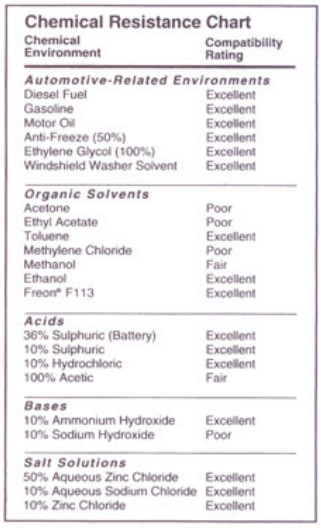
Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The Larson Electronics AVL-HAL-SOL-L810-LED-V1-30C Solar LED Strobe Light is an FAA AC 150/5345-43 Compliant unit with applications in aviation and hazardous locations. This lighting system contains a red LED strobe light, powered by a 30-watt solar panel with a 40aH lithium-ion battery pack. A remote-mounted day/night sensor automates activation and deactivation during use.

The AVL-HAL-SOL-L810-LED-V1-30C is an FAA Compliant solar-powered LED strobe light for signaling and notifications during aviation-related operations. This hazardous location lighting system consists of a 30-watt weatherproof solar panel, hazardous location LED strobe lamp (red), day/night sensor and 40aH lithium-ion battery pack.

LED Strobe Light: The hazardous location LED strobe lamp offers 1,050 lumens of red light, with a strobing rate of 30 Hz. Equipped with a 20° vertical and 360° horizontal beam spread, the unit provides syncing capabilities with multiple strobe lamps to 1/60 second. Syncing features are controlled by a master unit, catering up to 100 slave LED fixtures per master. Operators are provided access to a dip switch inside the LED lamp for selection between master and slave.

The lamp housing is waterproof, constructed of corrosion and chemical resistant polycarbonate with a red Pyrex globe, USCG accepted, ABS Type approved, and NEMA 4X compliant and suitable for hose-down areas. This hazardous location LED unit can survive heavy rains from all angles/directions, wind speeds up of 150 mph and 95% relative humidity. During use, the LED strobe light can also tolerate 130°F temperatures for 4+ hours and survive in salt-fog environments (Mil-spec salt fog test). For increased reliability in outdoor locations, this unit is resistant to UV radiation, which ensures no discoloration or cracking for 1 year.



Chemical Resistance Chart

Chemical Environment	Compatibility Rating
Automotive-Related Environments	
Diesel Fuel	Excellent
Gasoline	Excellent
Motor Oil	Excellent
Anti-Freeze (50%)	Excellent
Ethylene Glycol (100%)	Excellent
Windshield Washer Solvent	Excellent
Organic Solvents	
Acetone	Poor
Ethyl Acetate	Poor
Toluene	Excellent
Methylene Chloride	Poor
Methanol	Fair
Ethanol	Excellent
Freon® F113	Excellent
Acids	
36% Sulphuric (Battery)	Excellent
10% Sulphuric	Excellent
10% Hydrochloric	Excellent
100% Acetic	Fair
Bases	
10% Ammonium Hydroxide	Excellent
10% Sodium Hydroxide	Poor
Salt Solutions	
50% Aqueous Zinc Chloride	Excellent
10% Aqueous Sodium Chloride	Excellent
10% Zinc Chloride	Excellent

Click Photo to Enlarge

LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than traditional lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional lighting.
Solar Panel/Sensor: The 30-watt solar panel is equipped with a 40aH lithium-ion battery pack. At full charge, the system is capable of operating for 36 hours without sunlight or 3 full evenings without light. As with all solar powered equipment, charging time is affected by the amount of available ambient light. When ambient light levels drop below a certain level, such as on very cloudy days, the unit will not recharge.
The solar panel is weatherproof and designed to catch the maximum amount of sunlight possible when properly mounted. The day/night sensor is programmed to activate the LED light when ambient lighting reaches 35fc (minimum); and deactivate the strobe lamp when ambient lighting reaches 60fc (maximum).
Wiring: The LED strobe light is connected to the panel by 10` of 16/2 SOOW cord that provides flexibility for positioning of the solar panel and equipment into their respective optimum locations independently of each other. A 30` cable connects the day/night sensor to the solar panel.
Mounting: The AVL-HAL-SOL-L810-LED-V1-30C is compatible with inverted ceiling, wall or surface mounting requirements. Operators may access one, 3/4" NPT hub on the unit for mounting the LED strobe light during installation. The mounting apparatus for the solar panel is designed to allow a variety of options, including flat surfaces, such as a wall and square or round pole mounting. The sensor is remote-mount compatible.
Applications: Aviation, airspaces, helipads, signaling, military, aircraft hangars, FAA compliance, hazardous locations, marine locations, outdoor sites, remote notifications, industrial sites and more.
At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the

lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

AVL-HAL-SOL-L810-LED-V1-30C

Product ID: 221973

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**