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SPLT-1.06K-LM30-8XWP600E-AT-BC-MOD1

1.06 kW Solar Light Tower - 30' Mast - 7.5' Orange Trailer - (8) 60W LED Lamps, (12) 250aH Batteries

Product ID: 152928

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.

SPLT-1.06K-LM30-8XWP600E-AT-BC-MOD1 Trailer Mounted 3-Stage Light Tower

Light Mast Specs

Tower Length: 13.5` to 30`
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (1) 1,000lbs Hand Zinc-plated Winch
Cable: 3/16" Galvanized Aircraft Cable
Stabilization: Internal Friction Pads

Solar Specs

Panes: (4) 265 Watt panels
Method of Deployment: Slider
System Voltage: 12 Volts
Battery Bank: (12) 6V 250aH Lead Acid Batteries
Battery Capacity: 3,000aH Total / 1,500aH Usable
Main Power Switch: Combination Switch/Electromagnetic Thermal Circuit Breaker - Splash Proof/Weather Resistant
Battery Capacity: 1,000aH Total / 500aH Usable
Battery Compartment: Lockable, Federal Safety Orange
Wiring: Marine-grade, Multi-strand, Tin-plated Copper w/ Outdoor-rated PVC Insulation
Battery Termination: 15/16-18 UNC Marine Stud w/ SS Split-lock Washer and Hex Nut w/ 5/16 Tin-plated Copper Ring Terminal
Solar Panel Termination: SS Screws w/ #8 Tin-plated Copper Snap-spade Terminal

Quick Summary

13.5` to 30` Light Mast
Steel Construction
Power Coated Finish
Removable Mast Head
(4) 1,000lb Outriggers
125 mph Wind Resistance
Manual or Optional Electric Operation
(4) 265 Watt Solar Panels w/ Sliders
Fully Solar, No Fuel Needed
Waterproof/Vapor Proof Lamps
50,000+ Hour LED Life
Lamps ETL Approved for Wet Locations
IP68 Waterproof Lamps
Battery Charger
Auto Timer for Lights
ISO 9001:2015 Shop
CE Certified
EMI Certified
13` Minimum Ground Clearance
Complies w/ SAE J684 (Class II Trailers)

Charge Controller/Battery Charger Specs

Unit Type: Solid State, Outdoor Rated

LCD: 2-line, 16-character (Solar Array Voltage, Solar Array Current, Battery Voltage/Current)
Protection: Low Battery Voltage, Overdischarge, Automatic Reverse Polarity w/ Reverse Polarity Indicator Lamps for Solar Array/Battery Bank, Automatic Fault (w/o Fuses), Sulfate Deposit Build Up (Periodic Pulsing)
Battery Charger: Switching Regulator, Constant Voltage w/ Automatic Switch to Maintenance or Trickle Charge

Battery Charger Voltage: 110V AC 50/60 Hz (Input), 13.5V DC 90A (Output)

Charge Duration: 22 Hrs

LED Lamp Specs

Lamp Type: CREE LED

Total Watts: 480 (60W per lamp)

Total Lumens: 43,200 (5400 per lamp)

Luminous Efficacy: 90 lm/w

LED Life Expectancy: 50,000+ hours
Color Temp: 5600K, 4000K, or 3000K
Color Rendering Index: 80
Beam Angle: 60° Vertical, 75° Horizontal
Lighting Configuration: Flood Beam
Ambient Temp Range: -40°C to +85°C
Relative Humidity: 20% to 98%, Non-condensing
Lamp Housing Material: Cast Aluminum
Lamp Lens Material: Polycarbonate

Trailer Specs

Materials: Steel - 0.1875" Thick

Trailer Dimensions: 7.5`L` x 7`W trailer bed - 10.75` total length

Receiver: 2.5" x 2.5" 0.1875" Steel Tubing, Accepts Standard Class II (2) Drawbar/Hitch Pin - for Off-road Use Only

Tongue: 2.5" x 2.5" 0.1875" Steel Tubing w/ Removable Hitch Pin

Hitch: 2" Ball Coupler - Adjustable Height

Wiring: 7-Pin Flat
Axle: 3,500lb - Independent Suspension, Torsion Type

Suspension: 3,500 Lb 4-Leaf Double Eye Springs

Brakes: Electric

Deployment: Trailer Hitch Folds Up, Tie Down Points

Chains: 0.25" Safety Chains w/ Snap-type Hooks

Outriggers: (4) 2,000lb Manual Crack Leveling Jacks

Fender: Unbreakable, Molded, Solid Color, UV-stabilized HDPE - Completely Closed @ Inner Side

Wheels: (2) 15" 5x4.5 Steel Rims - 5-lug Pattern (4.5" Bolt Circle) w/ White Spoke Dress Wheels

Tires: ST205/75/D15 H188

Lights: Combination Stop/Tail/Turn, Front/Rear Markers, Lighted License Plate Holder

Trailering Speed: 70 mph (Maximum)
Color: Federal Safety Orange
Weight: +-900 lbs

Shipping: Common Freight

Shipping Dimensions: 8`-L x 8`-W x 12`-H

Shipping Weight: +-600 lbs

Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Special Orders - Special Requirements
Contact us for special requirements

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Made in the USA

The Larson Electronics SPLT-1.06K-LM30-8XWP600E-AT-BC-MOD1 solar powered LED light tower provides a safe and effective way for operators to quickly deploy 240 watts of intense LED illumination to elevations up to thirty feet. This solar light plant features a telescoping light tower that folds over for easy transportation, a rotating boom that allows for 360° rotation and a removable mast head for storing the four LED light fixtures when not in use. The 12V unit features four 265 watt solar panels and a 3,000 aH capacity battery bank. The entire assembly is mounted onto a 7.5` single axle trailer (federal safety orange), allowing operators to transport this solar light tower from location to location.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO LIGHT MASTS OR LIGHT TOWERS

Solar Powered Light Tower: This solar light tower includes four solar panels, solar charging system, battery bank, battery charger and manual crank up mast mounted on trailer with outriggers. The 1.06 kW solar generator system replenishes amp hours of usable battery capacity per day, assuming 5.5 hours of peak charging sunlight. This system delivers 12 volts for lighting mounted atop the 30` telescoping light mast.

The SPLT-1.06K-LM30-8XWP600E-AT-BC-MOD1 is supported by twelve, 250aH 6V lead-acid batteries, equating to 3,000aH battery capacity (1,500aH usable). A charge controller provides accurate readings during deployment. Designed for solar array voltage monitoring, wiring connections to the solid-state controller are faciliated by locking-type multi-pin connectors and includes an auxiliary 12V connection for other devices. The unit automatically switches outgoing current off, when battery voltage decreases below 10.7V. A switching regulator battery charger with automatic switch to maintenance or trickle charge is accessible on the system. This component features an input voltage of 110V AC 50/60 Hz and an output voltage of 13.5V DC (90 amps).

Light Mast: This telescoping three stage steel light mast from Larson Electronics' is designed to allow operators to quickly and safely deploy the four LED light heads in locations where this equipment must be elevated to heights up to 30` for effective coverage. Assembled with removable, rust-resistant, lockable fasteners, this light boom can be extended to 30` above the trailer floor for maximum area coverage, and collapsed to 13.5` for applications where a footprint smaller is required. The tower is constructed of square steel tubing with a base section 6.6` in length and 6" by 6" by 3/16" thick, lower section 6.78` in length and 5" by 5" by 3/16" thick, middle section 6.93` in length and 4" by 4" by 1/8" thick, upper section 7.08` in length and 3" by 3" by 1/8" thick, and top section 7.58` in length and 2" by 2" by 1/8" thick. Each section has a 1`+ overlap. The mast is extended to its full height using an included 1,000lb rated hand winch (zinc-plated) with 3/16" galvanized steel cable.

A 44" wide and 2" by 2" by 1/4" thick mounting plate is attached to the upper section of the mast which provides a strong and stable platform for the equipped LED light fixtures. When elevated to its full upright position, the mast can be rotated a full 360°. By loosening the T-Handle, operators can rotate the mast with easy in either direction. The mast can be positioned in one of four different positions, and locked back in place by re-tightening the T-handle. The mast itself spins freely with easy, and can typically be rotated with a single hand. The LM series of towers are powder coated with glossy blue finish for corrosion resistances and aesthetics.

The LM family of telescoping towers feature a proprietary mast guidance system, which provide increased stability during high winds. Four 1,000 lbs hand crank leveling jacks are used for leveling. The jacks can be leveled by hand crank or attachment provided for power drills. These outriggers can be extended 2` out from the side of the trailer for added stability. When lowered to 13.5`, the mast can withstand winds up to 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.



44" Mast Head for mounting lights and equipment
Click Image to Enlarge



Mast folds over for transportation and when not in use
Click Image to Enlarge

LED Light Fixtures: This solar light plant is equipped with eight of Larson Electronics` LEDWP-600E high output LED light fixtures. The LEDWP-600E consists of six 10 watt LEDs housed within a waterproof aluminum housing that is powder coated for added durability and resistance to corrosion. The housing incorporates integral cooling fins for efficient heat dissipation and increased LED longevity. The LED lamp assembly is protected by a shatterproof polycarbonate lens which is secured to the housing with a waterproof seal. Mounting hardware for the LEDWP-600E consists of a stainless steel coated bracket and stainless steel screws to provide secure mounting and resistance to rust and corrosion. The mounting assembly provides for 360/180 degrees of rotation and tilt to allow the user to position the unit as desired once mounted.

LED Technology: 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.

Lamp Control: Each lamp can be powered on individually, allowing operators to power one lamp or all four lamps at a single time to fit the required illumination requirements. An equipped dusk-to-dawn day/night sensor allows for automated operation of the light configuration set within the control center. Operators may also set a time/duration for light activation using the built-in auto timer feature.

Solar Panel Assembly: This unit is comprised of four 265-watt solar panels, generating a total maximum output of 1.06 kW. The panels are mounted securely on a sliding assembly. During deployment, the top solar panels slide out to form a four-panel array for maximum exposure to sunlight. The panels are wired to the solar charger control box which manages the charging system. When in use, the four solar panels are angled at 45° to capture the intensity of the sun for optimized light intake.

Component Control Center: All the electrical components are encapsulated in a NEMA 3R job box that is bolted to the trailer. Since most of these components are not rated for high heat, our component cooling system circulates air within the job box at 1400 CFM when the ambient temperature exceeds 90 degrees Fahrenheit. The job box that contains the component control system includes locks for security purposes.

Trailer Assembly: The entire assembly is mounted to a 7.5` by 7`, single axle trailer via six 1/2" anchor bolts. The two-wheel trailer is equipped with 3,500 lbs torsion-type axle that features independent suspension and leaf springs with 15" trailer tires. For wheel bearing lubrication, the axle wheel spindles are equipped with grease fittings. A standard 2" ball coupling, two standard 0.25" safety chains, snap-type hooks and 7-pin flat trailer plug allow for easy hookup and towing. The 2.5" x 2.5" x 0.1875" trailer tongue is constructed of steel tubing and can be removed for long term deployment. This component is bolted to a formed steel plate assembly and is equipped with an additional, removable hitch pin (all hitch components adhere to SAE J684/Class II trailers) for seamless pivoting (upwards)

during storage. A rugged and waterproof job box is included, safely secured to the trailer. Four outriggers mounted to the corners of the trailer allow operators to level the trailer, and provide stabilization during deployment. All trailer lighting complies with DOT/FMVSS regulations. Trailer wiring harnesses are sealed and water resistant.

The assembly features a maximum trailering speed of 70 mph. A 2.5" x 2.5" 0.1875" structural steel tubing receiver, which accepts standard Class II drawbar and hitch pin, can be used for tandem towing and is suitable for off-road use only. This component contains a powder-coated federal safety orange finish.

Applications: Remote work locations, construction sites, military bases, camping sites, outdoor events, security applications, emergency services, outdoor lighting, portable lighting 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.

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Frequently Asked Questions (FAQ)

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Product ID: 152928

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Lighting Study (Layout) Example 1**
- **HigResPic1**
- **Video1**
- **Video2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**