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SPLT-ART-0.9K-LM30-480AL-4X100W-R1

0.9 kW Solar Light Tower - 30' Light Tower - 7.5' Trailer - (4) 100W LED Lamps - 480aH Li-on Battery Pack

Product ID: 273377

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-ART-0.9K-LM30-480AL-4X100W-R1 Trailer Mounted Solar LED Mast

Mast Specs

Tower Length: Telescoping from 8.75` to 30`
Stages: 5
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (1) 3,500lbs Manual Winch, Electric Optional
Mast Cable: 3/16" Galvanized Aircraft Cable

Solar Specs

Panels: (3) 300 Watt panels
Method of Deployment: Sliders
System Voltage: 12 Volts
Solar Charge Controller: 60A MPPT
Battery Bank: (12) 40aH Lithium-ion Batteries
Battery Capacity: 480aH Total / 480aH Usable
Battery Charger: 120V
Inverter: NA

LED Light Specs

Lamp Type: LED

Quick Summary

8.75` to 30` Solar Light Tower
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Manual or Optional Electric Operation
(3) 300 Watt Solar Panels on Sliders
Fully Solar, No Fuel Needed
120V Battery Charger
Foldable Tongue
IP65 Waterproof LED Lights

Lamp Qty: (4)
Single-lamp Dimensions: 18"-L x 15"-W x 15.3"-H
Total Watts: 400W
Single-lamp Watts: 100W
Total Lumens: 40,000 lms
Single-lamp Lumens: 10,000 lms
Luminous Efficacy: -
LED Life Expectancy: 50,000+ hours
Color Temp: 6000K
Color Rendering Index: >75
Beam Angle: -
Lighting Configuration: Flood Beam
Ambient Temp Range: -40°C to +80°
Housing Material: Aluminum
Lens Material: Toughened Glass Lens
Mounting: Tower Mount, Lights Can be Rotated Front and Back w/ 360° Coverage

Trailer Specs
Materials: Steel
Trailer Dimensions: 10`L x 6`W (Trailer Bed) - 14`L (Tow Length)
Trailer Footprint: 14.65`L x 12.91`W
Wiring: 7-Pin Flat
Axle: 3,500lb
Suspension: 3,500 Lb 4-Leaf Double Eye Springs
Leveling Jacks: (4) 1,000 Manual Crack Leveling Jacks
Wheels: (2) 15" 5x4.5 Steel Rims
Tires: ST205/75/D15 H188
Hitch: 2" Ball Coupler
Transport Dimensions: 160.68"-L x 88"-W x 81.15"-H
Weight: +-1200 lbs
Shipping: Common Freight
Shipping Dimensions: 14`L x 10`W x 12`H
Shipping Weight: -
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-ART-0.9K-LM30-480AL-4X100W-R1 Portable Solar Light Tower provides a safe and effective way for operators to deploy LED lights from elevated positions between 8.75` to 30`. This solar assembly features a telescoping tower with a rotating boom that allows 360° rotation and a removable mast head for storage when not in use. Equipped with four LED lights, the unit features three 300-watt solar panels on sliders, a 120V battery charger and a 480aH capacity lithium-ion battery bank.

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

The SPLT-ART-0.9K-LM30-480AL-4X100W-R1 is a complete, portable solar-powered lighting system for outdoor and remote locations. This unit consists of an 8.75` to 30` telescoping mast, three 300-watt solar panels on sliders, lithium-ion battery bank, LED lights, battery charger and solar charge MPPT controller. All components are mounted on a single-axle trailer.

Operation:

- (3) 300W solar panels on sliders w/ solar MPPT charge controller
- (12) 40aH lithium-ion batteries - 480aH total battery bank/480aH usable
- (4) Outdoor IP65 rated LED lights
- 120V battery charger

- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

Lights: This solar-powered system features four LED flood lights. Each 100-watt LED flood light assembly consists of an integrated LED assembly paired with toughened glass to produce wide light distribution suitable for replacing 250 watt metal halide flood lights. This LED flood light features housing constructed of aluminum and toughened glass designed to withstand demanding conditions, and is IP65 waterproof and built to resist the damaging effects of an outdoor environment. This fixture can be used indoors or outdoors as well as in confined spaces without heat buildup.

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.

PA System: This unit does not have a PA system. We can add a one-way or two-way system upon request and with additional costs.

Router/Wireless 4G Hotspot: The solar LED light tower does not have a router or support wireless connections. We can add these capabilities at an additional cost.

GPS Tracking: This system does not feature GPS tracking (we can add GPS tracking at an additional cost).

LED Strobe: The SPLT-ART-0.9K-LM30-480AL-4X100W-R1 does not come with a security LED strobe light. We can add a blue, red or white LED strobe light at an additional cost (combination of colors is also possible).



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Surveillance Tower: This five stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy LED lights in locations where it must be elevated to heights up to 30` for effective coverage. This light boom can be extended to 30` for maximum area coverage and collapsed to 8.75` for applications where a smaller footprint 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 3,000 lbs hand winch 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 equipment. 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 resistance 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 components can be extended 2` out from the side of the trailer for added stability. When lowered to 8.75`, the mast can withstand winds up to 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.



Click Photo to Enlarge

Solar Panel Assembly: This unit is comprised of three 300-watt solar panels, generating a total maximum output of 0.9 KW. The panels deploy outwards using sliders. The panels are wired to the solar charger control box which manages the charging system. The solar panels are mounted to a frame angled at 45° to capture the intensity of the sun for optimized light intake.
Batteries: The solar unit contains a battery bank that consists of twelve, 40aH lithium-ion batteries for a 480aH battery bank (480aH usable). Compared to conventional SLA batteries, these units are 100% usable and lighter in weight. Over time, this results in lower operating and maintenance costs. An included battery level indicator that provides real-time power monitoring for the battery bank.
Solar Charge Controller: The solar-powered system features a 60A MPPT solar charge controller.
Battery Charger: This system comes with a 120V battery charger, which can be plugged into a local wall outlet during use, such as prior to deployment or when local power is available at the remote site. We can add a 220V or 240V battery charger to power additional equipment from the solar tower at an additional cost (portable battery chargers are also available).
Inverter: This unit does not come with an inverter. We can add an inverter to power additional equipment from the solar tower at an additional cost.
Backup Generator: This unit does not come with a backup generator. We offer models with gasoline, LPG/LNG or diesel backup gensets (may come with additional costs). For systems with battery chargers and backup generators, the battery charger is connected to the genset by default. It is possible to unplug the battery charger from the generator for local charging.
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 10` (trailer length) x 10` (trailer bed) x 14` (tow length), single axle trailer via six 1/2" anchor bolts. Trailer length refers to the measurement from the hitch to the rear bumper. The trailer bed refers to deck space that holds system components and equipment (not including tires, hitch, bumper and external trailer components). This two-wheel trailer is equipped with 3,500 lbs axle and leaf springs with 15" trailer tires. A standard 2" ball coupling, two standard safety chains, and 7-pin flat trailer plug allow for easy hookup and towing. The trailer tongue can be folded up for seamless storage. A rugged and waterproof job box is included, safely secured to the trailer. Leveling jacks on the trailer allow operators to level the trailer, and provide stabilization during deployment. All trailer lighting complies with DOT/FMVSS regulations.
Outriggers vs Leveling Jacks: The solar-powered system features manual-crank

leveling jacks. Outriggers help expand the surface area for large equipment or loads. This differs from leveling jacks that are used to stabilize or level systems. Leveling jacks can be mounted to outrigger legs (or the side of the trailer).
Applications: Live events, law enforcement, military, commercial, industrial facilities, remote locations 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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- **Business Certificate**
- **Shipping Time Map**