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SPLT-1.2K-LM24-4X100LTL-640AL-AT.DNS-BC

1,200W Solar Tower - 24' Mast - (4) 100W Lamps, Timer & Dusk/Dawn - (8) 80aH Lithium Ion Batteries, BC

Product ID: 306346



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-1.2K-LM24-4X100LTL-640AL-AT.DNS-BC Trailer Mounted 3-Stage Light Tower

Light Mast Specs
Tower Length: 13.5` to 24'
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (1) 1,000 lb Hand Winch
Cable: 3/16" Galvanized Aircraft Cable

Solar Specs
Panels: (4) 300 Watt panels
Method of Deployment: Fixed Mount, 45° Angle
System Voltage: 24V
Battery Bank: (8) 80aH Lithium Ion Batteries
Battery Capacity: 640 aH Total / 100% Usable
Rapid Battery Charger: 40A 120V 60 Hz w/ 25' Power Cord
Controller: MPPT

LED Lamp Specs
Lamp Type: CREE LED
Total Watts: 400W (100W per lamp)
Total Lumens: 54,000 (13,500 per lamp)
Luminous Efficacy: 135 lm/w
LED Life Expectancy: 80,000+ hours
Color Temp: 6500, 5000K, 4000K or 3000K
Beam Angle: 10° Spot, 24° Wide Spot, 38° Narrow Flood, 60° Flood, or 90° Wide Flood
Optics Efficiency: 98% - PMMA High Transmittance Optics
LED Drive: 90%

Quick Summary
13.5` to 24' Light Mast
Steel Construction
Powder Coated Finish
Removable Mast Head
(4) 1,000 lb Outriggers
125 mph Wind Resistance
Manual or Optional Electric Operation
A-Frame for mounted (4) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
Waterproof/Vapor Proof Lamps
80,000+ Hour LED Life
IP67 Waterproof Lamps
70% Lumen Retention after 80,000 Hours
N3R Weatherproof Job Box w/ (2) Locks

Ambient Temp Range: -40°C to +80°C
Lamp Housing Material: Cast Aluminum
Lamp Lens Material: Polycarbonate
Lamp Settings: Automatic, Timed Interval, Manual (via 3-way Switch)

Trailer Specs
Materials: Steel
Trailer Dimensions: 7.5`L` x 7`W trailer bed- 14` Total Length
Features: 4-corner D-rings, Forklift Skid Pockets
Hitch: 3" Pintle Hitch or 2" Ball Pintle Hitch
Wiring: 7-Pin Flat
Axle: 3,500lb
Suspension: 3,500 Lb 4-Leaf Double Eye Springs
Outriggers: (4) 1,000 Manual Leveling Jacks
Wheels: (2) 15" 5x4.5 Steel Rims
Tires: ST205/75/D15 H188

Shipping Specs
Weight: +-1000 lbs
Shipping: Common Freight
Shipping Dimensions: 8`-L x 8`-W x 12`-H
Shipping Weight: +-1000 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-1.2K-LM24-4X100LTL-640AL-AT.DNS-BC solar powered LED light tower provides a safe and effective way for operators to quickly deploy 400 watts of intense LED illumination to elevations up to twenty-four feet. This solar light plant features a telescoping light tower that folds over for easy transportation, a rotating boom that allows for 360° of rotation, and a removable mast head for storing the four LED light fixtures when not in use. This unit features four, 300-watt solar panels and a 640 aH capacity battery bank that is 100% usable. The entire assembly is mounted onto a 7' single axle trailer, which measures 14' in length, 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, rapid battery charger, MPPT controller, weatherproof NEMA 3R job box and manual crank up mast mounted on trailer with outriggers. This 1.06 KW solar generator system replenishes 700 amp hours of usable battery capacity per day, assuming 5.5 hours of peak charging sunlight. This system delivers 120 volts for an LED lighting system consisting of four, LED fixtures mounted atop the 24' telescoping light mast.

Light Mast: This telescoping five 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 24' for effective coverage. This light boom can be extended to 24' 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 5.92` in length and 6" by 6" by 3/16" thick, lower section 6.04` in length and 5" by 5" by 3/16" thick, middle section 6.19` in length and 4" by 4" by 1/8" thick, upper section 6.34` in length and 3" by 3" by 1/8" thick, and an top section 6.5` 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 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 lb 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.

LED Light Fixtures: This solar light plant is equipped with four 100W high output LED light fixtures. The LED lamps each produce 13,500 lumens of high intensity light. Nine Cree high output LEDs producing 1,500 lumens each are arranged in rows and paired with PMMA high purity optics to produce a well focused 24° wide spot beam that is ideal for providing far reaching concentrated illumination while still covering a substantial amount of area. We also offer optional optics with 10° spot, 38° narrow flood, 60° flood, and 90° wide flood beam spreads. The spot beams are tightly focused and are designed for high elevation mounting to achieve distance, making spot versions ideal for high mast and spots lighting. The flood beams are designed to provide more light over a larger area nearer the fixture, making flood versions ideal for use as dedicated work and area lights. The LED lamp assembly is protected by a shatterproof polycarbonate lens.

As well as unparalleled heat control, the included LED lights from Larson Electronics also offer IP67 rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40° Celsius to +80° Celsius, are waterproof, and resist ingress of dust, dirt and humidity. The housings are formed from die cast aluminum and the optics are high transmission PMMA with 98% light transmittance. The Cree LEDs help these units achieve resistance to vibrations and are rated at 70% lumen maintenance after 80,0000 hours of use. We recommend these LED lights for use in applications where a lot of vibration, dust, dirt, dampness and abusive working conditions are encountered. Each LED unit is equipped with a back mount trunnion style mounting bracket that allows the light to be adjusted through 160° of vertical movement. To adjust the LED lamps, the user simply loosens the set screws located on either side of the unit, moves it into the desired position, then re-tightens the screws.

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: The LED lamps feature three settings for versatile operation, which is facilitated by a 3-way switch (automatic, timed interval, and manual). Automatic operation is facilitated by a day/night (dusk to dawn) sensor, only turning the fixtures on when ambient light levels reach below 5 lux. Timed interval operation allows operators to set a timed schedule for the lamps. Manual operation includes standard on/off switch for manual override.

Solar Panel Assembly: This unit is comprised of four 300-watt solar panels, generating a total maximum output of 1.06 KW. The panels are mounted to a stationary assembly. The panels are wired to the solar charger control box which manages the charging system. The four solar panels are mounted to a frame angled at 45° to capture the intensity of the sun for optimized light intake.

A 40-amp, 120V 60 Hz rapid battery charger can be used to charge the batteries from

a 5-20R 20-amp receptacle. For reaching power sources during charging, the system comes with a 25-foot power cord. Circuit breakers protect the charger controller and batteries from overcharging.

Component Control Center: All the electrical components are encapsulated in a NEMA 3R job box that is bolted to the trailer. The weatherproof enclosure features two lockable locations at both sides, which deters tampering. 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 measures 14` in length and is equipped with 3,500 lbs axle and leaf springs with 15" trailer tires. For seamless transportation, the trailer features 4-corner D-rings (suitable for crane lifting and securing the unit) and forklift skid pockets (suitable for heavy-duty lifting machines). Two standard safety chains, and 7-pin flat trailer plug allow for easy hookup and towing. Hitch options include: 3" pintle hitch or 2" ball hitch. The trailer tongue can be removed for long term deployment. 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.

Applications: Remote locations, outdoor illumination, temporary work sites, construction, security checkpoints, agricultural sites, emergency camps, military, concerts, stadiums 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)