

### **SPLT-1.2K-LM24-4X160W-640AL-BC-R2**

**24' Solar Light Tower - 7.5' Trailer - (4) Panels, (4) 160W LED Lamps, Batteries, BC - Yellow**

**Product ID: 276915**

**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-1.2K-LM24-4X160W-640AL-BC-R2 Trailer Mounted Solar Light Mast**

##### **Mast Specs**

**Tower Length:** Telescoping 8' to 24'

**Stages:** 5

**Mast Head Length:** 44"

**Materials:** Steel

**Finish:** Powder Coated - Yellow

**Operation:** 2,500 lbs Electric Winch

**Mast Cable:** 3/16" Galvanized Aircraft Cable

##### **Solar Specs**

**Panels:** (4) 300 Watt panels

**Method of Deployment:** Fixed Mount

**System Voltage:** 12 Volts

**Solar Charge Controller:** MPPT

**Battery Bank:** (18) 40aH Lithium Iron Phosphate Batteries

**Battery Capacity:** 720aH Total / 720aH Usable

**Battery Charger:** 120V

**Inverter:** -

**System Runtime:** -

##### **LED Fixture Specs**

**Lamp Qty:** (4)

#### **Quick Summary**

8' to 24' Solar Light Tower

Steel Construction

Powder Coated Yellow Finish

Removable Mast Head

125 mph Wind Resistance

Electric Winch Operation

(4) 300 Watt Solar Panels

Fully Solar, No Fuel Needed

120V Battery Charger

Foldable Tongue

(4) LED Fixtures

Lockable Job Box

Mast Controls In Job Box

Lamp Technology: LED

Voltage: -

Total Watts: 640W

Single-lamp Watts: 160W

Total Lumens: 81,000 lms (20,250 lms per Light)

LED Lifespan Expectancy: 50,000+ Hours

Color Temp: -

Beam Angle: -

Beam Configuration: Flood

Switches: Manual On/Off, Dimmer Switches for Independent Lamp Control

Sensor Type: Day/Night

Timer: Included

Materials: -

Mount: Mast

#### Trailer Specs

Materials: Steel

Trailer Dimensions: 7.5`L x 7`W Trailer Bed - 10.75` Total length

Trailer Footprint: -

Wiring: 7-Pin Flat Connector, 7-pin to 6-pin Adapter Included for 6-pin Tow Vehicles

Axle: 3,500 lb

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: +-1500 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

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Fax: 1-903-498-3364

E-mail: [sales@larsonelectronics.com](mailto:sales@larsonelectronics.com)

### **Made in the USA**

**The Larson Electronics SPLT-1.2K-LM24-4X160W-640AL-BC-R2 Portable Solar LED Tower provides a safe and effective way for operators to illuminate outdoor locations from elevated positions up to 24`. This solar assembly features a telescoping tower with a removable mast head for storage when not in use. Equipped with four LED lights generating 81,000 lumens, the unit has four 300-watt solar panels (fixed mount), lithium iron phosphate battery bank, 120V battery charger and lockable job box. All system components are secured to a towable trailer.**

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

The SPLT-1.2K-LM24-4X160W-640AL-BC-R2 is a complete, portable solar-powered outdoor LED system for remote locations. This unit consists of a 24' telescoping mast with electric winch, four 300-watt solar panels, four LED fixtures, lithium iron phosphate battery bank, battery charger and solar charge MPPT controller. All components are mounted on a single-axle trailer. This system does not come with monitoring plans.

#### **Operation:**

- (4) 300W solar panels w/ solar MPPT charge controller
- (18) 40aH lithium iron phosphate batteries - 720aH total battery bank/720aH usable. This has the same capacity as a 1440aH AGM wet battery system, but

with reduced weight and allows for 100% capacity instead of 50% capacity of AGM batteries.

- (4) 160-watt LED fixtures
- 120V battery charger
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

**LED Fixtures:** The SPLT-1.2K-LM24-4X160W-640AL-BC-R2 features four, 160-watt LED lights for outdoor illumination. The lights generate up to 81,000 lumens at 20,250 lumens per fixture. These LED lamps are equipped with a flood beam configuration for wide-area lighting. Settings for the LED fixtures include: timer or day/night operation. Operators may access a manual on/off switch and dimmer switches for independent light control on the system.

**LED Benefits:** Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. 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 is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life. LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.

**Cameras:** The solar light mast does not feature cameras. We can add monitoring devices and NVRs at an additional cost.

**Router/Wireless 4G Hotspot:** This system does not have a router (we can add wireless connectivity at an additional cost).

**GPS Tracking:** GPS tracking is unavailable on this system. We can add GPS tracking at an additional cost.

**LED Strobe:** The SPLT-1.2K-LM24-4X160W-640AL-BC-R2 does not have a blue 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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**Light Tower:** This five-stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy the LED lights in locations where they must be elevated to heights up to 24' for effective coverage. This light boom can be extended to 24' for maximum area coverage and collapsed to 8' for applications where a smaller footprint 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 2,500 lbs electric winch with 3/16" galvanized steel cable. The LM series of towers are powder coated with glossy blue finish for corrosion

resistance and aesthetics (this system is powder coated yellow). 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 light fixtures.

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 collapsed, the mast can withstand winds up to 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.



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**Solar Panel Assembly:** This unit is comprised of four 300-watt solar panels, generating a total maximum output of 1.2 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 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 eighteen, 40aH lithium-ion batteries for a 720aH battery bank (720aH 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 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 have an inverter. We can add one to the system at an additional cost.

**Backup Generator:** This unit does not have 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 7.5' by 7', 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 (a 7-pin to 6-pin adapter is also included for 6-pin tow vehicles). 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

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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, outdoor surveillance, 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](mailto: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)

Export Control Classification Number (ECCN): EAR99

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