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SPLT-1.2K-LM30-4X300CPR-AT.DNS-BC-TLR12

1.2 kW Solar Light Tower - 30' Light Tower, 7.5' Trailer - (4) 300W LED Lamps, (10) 176aH LFP Batteries, BC

Product ID: 284719

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-LM30-4X300CPR-AT.DNS-BC-TLR12 Trailer Mounted 3-Stage Light Tower

Light Mast Specs
Tower Length: 13.5` to 30`
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Desert Tan
Operation: (1) 1,000lbs Hand Winch
Cable: 3/16" Galvanized Aircraft Cable

Solar Specs
Panes: (4) 300 Watt panels
Method of Deployment: Slider
System Voltage: 24 Volts
Battery Bank: (10) 176 aH Lithium Iron Phosphate Batteries
Battery Capacity: 1,760 aH Total / 1,760 aH Usable
Battery Charger: 120/240V

LED Lamp Specs
Lamp Type: LED
Total Watts: 1,200W
Single-lamp Watts: 300W
Total Lumens: 168,000 lms
Single-lamp Watts: 42,000 lms
Luminous Efficacy: -
LED Life Expectancy: 50,000+ hours
Color Temp: 5000K
Color Rendering Index: >80
Beam Angle: Flood
Lighting Configuration: Flood Beam
Ambient Temp Range: -
Lamp Housing Material: 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 - 10.75` total length
Hitch: 2" Ball Coupler
Wiring: 7-Pin Flat
Axle: 3,500lb
Suspension: 3,500 Lb 4-Leaf Double Eye Springs

Quick Summary
13.5` to 30` Light Mast
Steel Construction
Powder Coated Desert Tan Finish
Removable Mast Head
(4) 1,000lb Outriggers
125 mph Wind Resistance
Manual or Optional Electric Operation
(4) 300 Watt Solar Panels w/ Sliders
Fully Solar, No Fuel Needed
Battery Charger
50,000+ Hour LED Life
IP65 Waterproof Lamps
Battery Charger
Auto Timer + Day/Night Sensor

Outriggers: (4) 1,000 Manual Crank Leveling Jacks

Wheels: (2) 15" 5x4.5 Steel Rims

Tires: ST205/75/D15 H188

Weight: +-600 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-1.2K-LM30-4X300CPR-AT.DNS-BC-TLR12 solar powered LED light tower provides a safe and effective way for operators to quickly deploy 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 unit features four 300 watt solar panels and a 1,760 aH capacity battery bank. The entire assembly is mounted onto a 7.5` single axle trailer, 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, 120/240V battery charger and manual crank up mast mounted on trailer with outriggers. The 1.2 kW solar generator system replenishes amp hours of usable battery capacity per day, assuming 5.5 hours of peak charging sunlight. This system delivers 24 volts for lighting mounted atop the 30` telescoping light mast. The SPLT-1.2K-LM30-4X300CPR-AT.DNS-BC-TLR12 is supported by a lithium iron phosphate battery pack, equating to 1,760 aH battery capacity (1,760 aH usable). A 120/240V battery charger provides flexibility during deployment, which allows operators to supply power to the batteries using an external power source. This feature is useful for fast turnaround projects, sustaining extended periods of illumination and remote sites that lack adequate exposure to sunlight.

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. 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 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 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 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 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 four 300-watt LED lights. Each LED light provides 42,000 lumens of output with a 5000K color temperature rating. A flood beam angle ensures wide-area illumination at the work site. Protected by an aluminum housing with a polycarbonate lens, the LED lights are IP65 waterproof rated for outdoor use. Each LED light is equipped with an adjustable bracket for light head positioning.

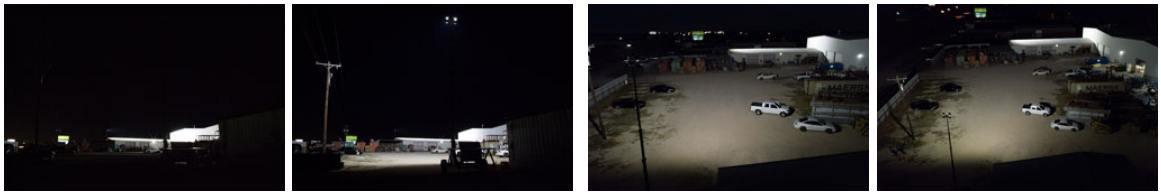
LED Technology: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate 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.

Images Below Show Light Tower Lowered and Raised to 30ft.



Click Images to Enlarge



Lamps Off (Ambient Light) **(4) 60 Watt LED Lamps Turned On Illuminating Wall 200ft. Away (20,000+sq.ft. area)**



Area from Above

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 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 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 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 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.
Summary of specifications:

- Extendable photovoltaic solar array with 1200 watt capacity
- High capacity battery bank (sealed, no maintenance)
- (4) independent adjustable LED flood lights designed for rugged outdoor use
- Rapid plugin battery bank charger
- Durable, powder coated steel construction
- Removable tongue allowing compact shipment and storage
- Forklift pockets, (4) "d" rings on trailer for shipping and 4 outrigger jacks for stability and safety
- Independently adjustable LED floodlights for specific illumination requirements
- Ability to charge without solar power via a 110 volt ac battery charger
- Silent operation suitable for a 24/7 quiet hours environment
- Weekly illumination timers to brighten for scheduled operations and dim during sleep times in order to not disturb sleeping dorm residents, yet continue to maintain illumination for area safety and security
- Charged by sun, 240/110 AC plug or NATO Slave station
- 30 ft. telescoping mast
- 4 retractable solar panels
- 15 minute setup
- Four outrigger jacks
- No noise, no smell
- Normal solar charge cycle of 6-8 hrs
- 3200 pounds towing weight
- 54 hour of continuous use back-up
- Fits in container or 463L pallet

- Fans for cooling in hot environments
- Filters to reduce dust damage
- Desert tan powder coat
- Steel lockable housing
- Removable hitch tongue
- Lunette ring (NATO pintle hitch) for towing
- 100% renewable energy
- Zero emissions
- No fuel costs
- Minimal maintenance
- Timer interval operation for lights
- Automatic, dusk to dawn setting for lights
- Manual, switch on and off setting for lights

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Frequently Asked Questions (FAQ)

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Product ID: 284719

Export Control Classification Number (ECCN): EAR99

Options:

SPLT-1.2K-LM30-4X300CPR-AT.DNS-BC-TLR12-Charger Voltage

Example: SPLT-1.2K-LM30-4X300CPR-AT.DNS-BC-TLR12-120V

Charger Voltage	
120V	-120V
240V	-240V

Links (Click on the below items to view):

- **Video1**
- **Video2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**