580W Solar Light Tower - 30' Tower - 14' Trailer - (4) LED Lamps - (2) Cameras w/ NVR, Router/4G Hotspot

SPLT-.53K-LM30-4X60LTL-ISDG-AT.DNS-TLR14-2XPTZ-W4G



The Larson Electronics SPLT-.53K-LM30-4X60LTL-ISDG-AT.DNS-TLR14-2XPTZ-W4G Solar Light Tower provides a safe and effective way for operators to quickly deploy 400 watts of intense LED illumination and security cameras to elevations up to thirty feet. This solar light plant features a telescoping light tower that folds over for easy transportation, features a rotating boom that allows for 360° of rotation, and a removable mast head for storing the four LED light fixtures and two outdoor cameras when not in use. Equipped with a 4kW backup diesel generator, the unit features two, 265-watt solar panels and a 200-amp capacity battery bank. The entire assembly is mounted onto a 14` single-axle trailer, allowing operators to transport this solar light tower from location to location. A 2TB NVR can be found at the base of the mast.

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

**Solar Powered Light Tower:** This solar light tower includes two solar panels, solar charging system, battery bank, backup diesel generator, four LED lamps with auto timer/sensor, two IP security cameras supported by an NVR, router/4G network capabilities and a manual crank-up mast mounted on a 14' trailer with outriggers. This 0.53KW 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. Operators may access a 2TB NVR for network configurations. The system, which supports wireless 4G hotspot access, utilizes CAT5E cable for networking.

**Solar Panel Assembly:** This unit is comprised of two, 265-watt solar panels, generating a total maximum output of 0.53 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 two solar panels are mounted to a frame angled at 45° to capture the intensity of the sun for optimized light intake.

**Backup Generator:** An included backup generator can be used for supplementary power. This 4kW diesel genset contains a 20-gallon fuel tank.

**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 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 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 four of Larson Electronics` GAU-LTL-60W-LED-24VDC high output LED light fixtures. Each LED lamp produces 8,100 lumens of high intensity light while drawing only 100 watts at 1.7 amps from a 24 volt electrical system. Six CREE® high output LEDs producing 1,350 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 GAU-LTL-60W-LED-24VDC series of LED lights from Larson Electronics offers 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 80,000+ 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.

**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 restriking 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.











**Click Images to Enlarge** 









Lamps Off (Ambient Light)

Area from Above

Network Cameras: Two security cameras provide operators with crisp, 1080p full-HD high resolution images. A 4.7-94mm varifocal lens automatically adjusts focus, providing operators with precise 20x optical zoom levels. Integrated long-range IR LEDs, with a wavelength measurement of 850 nm, enable the day/night cameras to see distances up to 492` under nighttime conditions. The units offload videos in MP4 format and features H.264 and MJPEG video compression. The PTZ cameras each measure a compact 14.38" x 7.12".

The cutting-edge security devices are designed to perform in outdoor locations and rainy conditions. The IP66-rated units resist the negative effects of non-corrosive liquids. De-fogging features enable the units to operate in rainy and foggy conditions. The devices are capable of operating in temperatures between -22°F and 149°F. NVR: The solar tower contains an 8-channel NVR that can be used with the network cameras. Setup only takes minutes via plug-and-play, which automatically detects, displays and configures system components. With multiple recording modes (Schedule, Continuous, Motion Detection and Event) and 2TB of storage, users could capture hours of footage with ease. The remote configurable network recorder features a bit rate of 40Mbps incoming and 80Mbps outgoing at up to 60fps per channel. To maximize storage, the unit supports H.265, H.264, and H.264 OVC video compression. The network recorder is compatible with two-way audio streaming (camera dependent) and includes 9 ethernet ports (RJ-45 interface). During recording, the unit handles the following data: activity log, email notification, event log, event notification, video analytics and event search. This device offloads videos in MP4 format, Cameras hooked up to the NVR-POE-8CH-2TB may use power directly via PoE (802.3af / 802.3at) during operation. The NVR runs on 100 - 240VAC of power and is suitable for use in temperatures between 14°F - 131°F.

**NVR Inputs:** (1) RCA, 4 Sensor Inputs

**NVR Outputs:** (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (front), (1) USB 3.0 (rear) Router/Wireless 4G Hotspot: Operators can connect to Verizon 4G internet via a professional-grade router. The unit supports dual-band 2.4 GHz (450 Mbps) and 5 GHz (1,300 Mbps), as well as 3x3 MIMO. Stateful firewall and DoS prevention ensures secure network usage during operation. Settings and configurations are controlled via a cloudbased smartphone app or web-based computer program. An external antenna is available for signal boosting and extending hotspot coverage. The antenna measures 12` and offers compatibility with the following frequencies: 690~960 MHz, 1710~2170 MHz and 2500~2700 MHz.

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 14` 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.

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 <a href="mailto:sales@larsonelectronics.com">sales@larsonelectronics.com</a> for more information about our custom options tailored to meet your specific industry needs.



**Options:** 

SPLT-.53K-LM30-4X60LTL-ISDG-AT.DNS-TLR14-2XPTZ-W4G-Beam Config-Color Temp

Example: SPLT-.53K-LM30-4X60LTL-ISDG-AT.DNS-TLR14-2XPTZ-W4G-10SP-10SP

Beam Config	
10° SPOT	-10SP
24° WIDE SPOT	-24WS
38° NARROW FLOOD	-38NF
60° FLOOD	-60F
90° WIDE FLOOD	-90WF

Color Temp	
3000K	-10SP
4000K	-24WS
5000K	-38NF
6500K	-60F



Links (Click on the below items to view):

- SpecSheet
- HigResPic1