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RNT-SPLT-.79K-LM20-TLR7-2XPTZ-20X-2TB-W4G-24V

RENTAL 20' Portable Solar Security Tower - 7.5' Trailer - (3) Panels, (2) IP Cameras, 2TB NVR - Router/4G Hotspot

Product ID: 319191



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.

RNT-SPLT-.79K-LM20-TLR7-2XPTZ-20X-2TB-W4G-24V Trailer Mounted Solar Generator Security Mast

Mast Specs

Tower Length: 20`
Stages: 5
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (1) 1,000lbs Hand Winch
Mast Cable: 3/16" Galvanized Aircraft Cable
Cable Sheath: Sealtight Coiled Tubing

Solar Specs

Panels: (3) 265 Watt panels
Method of Deployment: Fixed Mount
System Voltage: 24 Volts
Battery Bank: (6) Lithium-ion 40aH Batteries
Battery Capacity: 480 aH Total / 480 aH Usable
Cell Plan: Not Included

IP Camera Specs

Unit Type: (2) Security Camera
Camera Dimensions: 14.38" H x 7.12" D
Camera Weight: 9 lbs
Total Watts: 51 (Max)
Voltage: 24V AC (PoE - 802.3at)
Image Sensor: CMOS
Connectors: 1.0Vp-p, 75 Ohm, BNC

Quick Summary

20` Mast
Steel Construction
Powder Coated Finish
Removable Mast Head
(4) 1,000lb Leveling Jacks
125 mph Wind Resistance
Manual or Optional Electric Operation
A-Frame for mounted (2) 265 Watt Solar Panels
Fully Solar, No Fuel Needed
Low Noise Operation
IP66 Waterproof Cameras
Day/Night Monitoring
De-fog Viewing (Rain and Fog)
360° Rotation, -15°~90° Tilt
492` IR Distance
Full-HD, 20x Optical Zoom
Motion Detection
CE, FCC, RoHS, UL Listed NVR
Embedded Linux Operating System
CAT5E Networking Cable
Professional Grade Router
Extended Coverage via External Antenna
Verizon 4G Hotspot

Effective Pixels: 2.1 MP, 1920 x 1080 Resolution
Min. Illumination: 0.02 Lux @ F1.6 AGC On, 0 Lux w/ IR
Electronic Shutter: 1 ~ 1/10,000s
Lens: 4.7-94mm Varifocal Lens
Angle of View: 58.3° (Wide) ~ 3.2° (Tele)
Optical Zoom: 20x
Day/Night: ICR
IR Distance: 492` (850 nm)
Video Framerate: 1080p @ 30fps
Video Offload: MP4
Video Output: (1) BNC
Language: English

Ambient Temperature Range: -22°F to 149°F
Housing Materials: Aluminum
Lens Material: Polycarbonate
Mounting: Tower

NVR Specs

Device Type: Network Video Recorder

Storage Capacity: 2 TB SATA Hard Drive

Channels: 8

Camera Resolution Support: Up to 8MP

Installation Type: Plug and Play

Incoming Bit Rate: 40Mbps
Outgoing Bit Rate: 80Mbps
FPS: 60fps Per Channel
Compression Format: H.265, H.264, H.264 OVC
Recording Modes: Continuous, Schedule, Event, Motion Detection, VCA
Export Format: MP4
Video Outputs: (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (Front), (1) USB 3.0 (Rear)
Two-way Audio Input: 1-ch, RCA
Power Over Ethernet: = 120W, Supported Standards- 802.3af and 802.3at
Alarm Input: 4x (Rear Panel), Camera Dependent
Alarm Output: 1x (Rear Panel), Camera Dependent
Protocols: IPv4, TCP/IP, UDP, HTTP, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, ONVIF, HTTP Multipart
Power Requirements: 100 ~ 240V AC
Housing Material: Aluminum
Operating Temp: 14°F ~ 131°F
Networking Cable: CAT5E

Router/Antenna Specs

Router Type: Pepwave Surf SOHO Router
WAN Interface: 1x 100/1000M Ethernet Port, 1x USB 2.0 Interface, Wi-Fi as WAN
LAN Interface: 4x 100/1000M Ethernet Ports, Simultaneous Dual-Band 11ac Wi-Fi AP
Wi-Fi AP Operating Frequency: 2412 - 2472MHz and 5180 - 5825MHz
Wi-Fi Data Rates: 3x3 MIMO, 2.4GHz: 450Mbps or 5GHz: 1300Mbps
Wi-Fi Antenna: 3x External Wi-Fi Antenna
Router Throughput: 120 Mbps
Power Input: DC Jack: 10V - 24VDC AC Adapter: AC Input 100V - 240V, DC Output 12V, 3A
Power Consumption: 26W (w/ USB WAN), 22W (w/o USB WAN)
Dimensions: 9.17` x 5.6` x 1.18`
Weight: 0.86 lbs
Humidity: 15% - 95% (Non-condensing)
External Antenna Frequency: 690~960 MHz, 1710~2170 MHz, 2500~2700 MHz
External Antenna Gain: 5dB
External Antenna Height: 12`

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

Leveling Jacks: (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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This unit is for rentals

Made in the USA

The Larson Electronics RNT-SPLT-.79K-LM20-TLR7-2XPTZ-20X-2TB-W4G-24V solar powered security tower provides a safe and effective way for operators to quickly deploy cameras, security devices, and other equipment to elevations up to 20 feet. This solar security plant features a telescoping tower that folds over for easy transportation, a rotating boom that allows for 360° of rotation and a removable mast head for storage when not in use. This low-noise unit features two IP outdoor cameras, router/wireless 4G hotspot access, three 265-watt solar panels and a 480aH capacity lithium-ion battery bank with 480aH being usable. 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

This trailer mounted security mast with solar generator has a 12" x 12" x 6" junction box and two, IP outdoor cameras mounted at the top of the mast. The junction box supports the security cameras for a 360° field of view and can be used with other electrical devices for each operator`s specific needs, such as small sensors and monitoring devices. The junction box is mounted to the mast head via a half-moon shaped mounting plate. External sealtite coiled tubing runs around the mast to allow operators to run Ethernet cable to the junction box at the top of the mast. The tubing connects the junction box and base solar component box together. The entire assembly is mounted onto a 7.5` single axle trailer, allowing operators to transport this portable solar tower from location to location. Operators may access a 2TB NVR for network configurations. The system, which supports wireless 4G hotspot access, utilizes CAT5E cable for networking.

Network Cameras: The 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 cloud-based 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.



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Click Photo to Enlarge



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Solar Powered Security Tower: This continuous-operation solar security tower includes two 265 watt solar panels, solar charging system, battery bank and manual crank up mast mounted on trailer with leveling jacks. This 0.79KW 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 equipment mounted atop the 20` telescoping mast.
Mast: This telescoping five stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy a variety of equipment in locations where it must be elevated to heights up to 20` for effective coverage. This mast can be extended to 20` above the trailer floor for maximum area coverage. The tower is constructed of square steel tubing. The mast is extended to its full height using an included 1,000lb rated hand winch with 3/16" galvanized steel cable. Junction boxes are mounted at the top of the first stage and at the very top of the mast for equipment setup, connection, and deployment.
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 cameras. A half-moon shaped mounting plate on the top of the mast head provides a secure mounting platform for the NEMA 3R 12" x 12" x 6" junction box, where operators can mount cameras, indicator lights, and route electrical cabling. 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 leveling jacks can be extended 2` out from the side of the trailer for added stability. When lowered to 9`, 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



Click Photo to Enlarge



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Solar Panel Assembly: This unit is comprised of three 265-watt solar panels, generating a total maximum output of 0.79 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.

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 leveling jacks 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 sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.









Frequently Asked Questions (FAQ)