Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.765.7664

Product ID: 330257

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image:

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.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G Solar Powered Light Tower

Light Mast Specs

Tower Length: 20`
Materials: Aluminum
Finish: Powder Coated and/or anodized
Operation: Air Compressor
Tower Weight Capacity: 198 lbs
Equipment Mounting: T-Head Mounting Bracket at Top of Mast

Quick Summary

20 Foot Pneumatic Tower
Aluminum Construction
NEMA 3R Weatherproof Rating
(4) 1,000lb Retractable Outriggers
Removable Hitch
(2) 265 Watt Solar Panels
Fully Solar, No Fuel Needed
Made in the USA

Solar Specs

Panes: (2) 265 Watt panels
Panel Dimensions: 3.26` W x 6.43` H
Method of Deployment: Sliding Mount
Panel protection: Fused Combiner Box
System Protection: Battery Over/under and Ground Fault
System Voltage: 24V DC (12V DC Optional)
Battery Bank: (2) 80aH Lithium-ion Batteries
Battery Capacity: 160aH Total and 160aH Usable
Noise Level: Silent
Output: Low Voltage 12-24V DC
Run Time: Depends on Equipment Selection
Battery Charger Voltage: 120V AC

LED Floodlight Specs

Lamp Quantity: (2)
Lamp Type: CREE LED
Single-lamp Dimensions: W-9" D-3.25" H-6.5"
Voltage: -
Total Watts: 120W
Single-lamp Watts: 60W
Total Lumens: 10,800
Single-lamp Lumens: 5400
Luminous Efficacy: 90 lm/w
LED Life Expectancy: 50,000+ hours
Color Temp: 5600K
Color Rendering Index: 80
Beam Angle: 60° Vertical, 75° Horizontal
Lighting Configuration: Flood Beam
Power Efficiency: >95%
Power Factor: 0.992
Sensor Type: Motion Sensor
Ambient Temp Range: -50°C to +70°
Housing Material: Cast Aluminum
Lens Material: Polycarbonate
Mounting: Tower Mount w/ Adjustable Trunnion U-Bracket
Wiring: -

LED Strobe Light/Alarm Specs
Lamp Quantity: (1)
Strobe Colors: Blue and Red
Strobe Pattern (Motion Detected): Red, Blue, Red, Blue
Alarm (Motion Detected): (2) Siren Horns
Alarm Settings: 24/7 During Motion, Only When Dark + Motion or Scheduled + Motion

Router/Public Address System Specs
Router Type: 4G LTE
Carrier: Unlocked
LTE Service: Not Included/Customer Provided SIM Card
Speaker Type: Omni-directional
Voice Alerts/Video Footage: Via Cell Intl App or Desktop Program

Trailer Specs
Materials: Steel
Trailer Dimensions (w/ tongue): 10.23` L x 6.17` W x 10.61` H
Hitch: 2" Ball Coupler
Wiring: 7-Pin Flat
Suspension: 2,700lb Leaf Springs
Outriggers: (4) 1,000 Manual Crack Leveling Jacks - Retractable
Wheels: (2) 15" 5x4.5 Steel Rims
Tires: ST205/75/D15 H188
Finish: Powder Coated

Weight: +-1200 lbs
Shipping: Common Freight
Shipping Dimensions: 6-L x 6.25`-W x 10.62`-H
Shipping Weight: +-1700 lbs
Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Special Orders - Special Requirements
Contact us for special requirements
Intl: 1-903-270-1187
Toll Free: 1-800-369-6671
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

This unit is for rentals

Made in Texas

The Larson Electronics RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G Solar Powered Mast provides active and reliable monitoring of remote locations, outdoor areas and work sites. This unit features two 265 watt solar panels that charges the 160aH lithium-ion battery bank with 160aH of usable power, a 120V AC battery charger, two LED flood lights, one blue/red strobe light, two siren horns, 4G LTE router and omni-directional speaker. The weatherproof pyramid enclosure provides protection from the elements and is fully removable for maintenance.

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

The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G is ideal for outdoor, remote locations. The towable unit can be transported and deployed by a single operator for increased versatility on the job. The equipment tower is raised and lowered via an included air compressor. The compressor and all other on-board electronics are powered fully by the solar charged battery bank.

Light Mast/Equipment Tower: The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G features a twenty-foot tall pneumatic light tower with a T-Head mounting bracket mounted at the top. The mounting bracket holds two LED flood lights, one LED strobe light, two siren horns, 4G LTE router, omni-directional speaker and motion sensors. The aluminum mast is raised and lowered to its full height via an on-board air compressor. The compressor is operated via controls mounted on the inside of the unit's access door. Operators make sure the control systems switch is powered on and the mast drain valve is fully closed by turning it completely clockwise before toggling on the air compressor switch. Once the compressor switch is turned on, it will automatically begin to raise the mast and mounted equipment to a height of twenty feet. The mast lowering process is just as simple. Operators simply confirm that the air compressor power switch is in the off position before opening the mast drain valve by turning it completely counterclockwise. The mast will lower itself back to its lowest position. Once that occurs, operators re-close the mast drain valve completely.

All power on the unit can then be shut off for storage or transport. Internal wiring within the pneumatic mast aids in cable management, as well as reducing tampering and vandalism. Another very useful feature of the air compressor is that it will automatically "top off" every few days to ensure that the mast stays in a fully extended position for longer deployment periods.

LED Flood Lights: This solar-powered tower contains two LED flood lights for outdoor illumination. Included motion sensors automatically activate the units upon sensing movement in the area at night. The light assembly consists of six LEDs paired with high purity specular optics to produce a wide light distribution overpowering that of a 500 watt quartz flood lights. This light is constructed of three angled boards that helps provide a wider spread. Instead of the light only shining forward, the center board is concentrated to go straight out while the boards on the side are 45° offset. The LED lamps are designed to withstand demanding conditions and are waterproof, vapor proof, and built to resist the damaging effects of an outdoor environment.

The lamps are protected by a waterproof aluminum housing that is powder coated for added durability and resistance to corrosion. The housing incorporates integral cooling fins for efficient heat dissipation and increased LED longevity. The LED lamp assemblies are protected by a shatterproof polycarbonate lens, which is secured to the housing with a waterproof seal. A 1/2" waterproof connector provides a secure and sealed power connection point and rounds out this unit's weather-resistant construction. An optional glare shield it shipped with the lights.

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.

LED Strobe Light/Siren Horns: The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G comes with a blue/red strobe light. This unit strobes red, blue, red and blue when movement is detected by the motion sensor. Two siren horns with 360 degrees of coverage are also triggered when motion is detected in the area. Alarm settings for the strobe light and siren horns include: 24/7 during motion, only when dark + motion or scheduled + motion.

Router: The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G comes with a 4G LTE router for wireless connection to the system. Operators can use the router to view live video feeds and recorded videos over a network. This router is unlocked, allowing customer-provided SIM cards to be inserted for customer-provided LTE services. Video footage is viewable over the network (from any remote location with internet access) using a cell phone app or desktop program.

Public Address System: This solar-powered security unit features a public address system that facilitates voice alerts in the deployment area from an omni-directional speaker. Operators may issue voice alerts or commands to the speaker from any remote location with internet access using a cell phone app or desktop program.

Batteries: The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G features two 80aH lithium-ion rechargeable batteries (160aH total/160aH usable). An included battery charger that operates on 120V AC allows operators to charge the battery from compatible outlets.

Solar Charge Controller: In this 24 volt system solar control system, each panel is terminated with a fused combiner box with a single lever action cut-off switch. With the switch set to the `on` position, the combiner box passes power to the 60-amp capacity Morningstar TriStart MPPT solar charge controller. Oddly enough, most charge controllers aren’t rated past 104 degrees Fahrenheit despite the fact the will always be close to direct sunlight. In the summer time in Texas, our fabrication shop is normally warmer than that, so this solar light tower uses a charge controller that would support the southern heat. We improve on that capability by shading the charge controller and adding additional air flow from the exhaust of a 1400 CFM

component cooling system.

Component Control Center: In order to ensure that the 50% threshold on the batteries is controlled, this solar trailer includes a system of min/max voltage sensors and relays that monitor the voltage produced by the batteries and will automatically shut off power distribution when the battery capacity falls below 50%. This protects the batteries from failure. We also include ground fault protection and an Morningstar RM-2 remote digital monitoring system to track and log all activities related to the charger controller and battery health. In the event there is an issue with the solar trailer, the SD card can be removed from the Morningstar RM-2 and sent to Larson Electronics for analysis.

All the electrical components, including the combiner panel, charge controller, over/under battery monitoring and ground fault isolation are encapsulated in a NEMA 3R pyramid enclosure 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° Fahrenheit. The component control center also includes a terminal block so that customers can mount additional electronic gear without interfering with the charging systems. The pyramid system includes a locking access door for security purposes. The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G also includes a T-Head mounting bracket at the top of the mast for mounting user-provided equipment.

Solar Tower Runtime

Operation*	Hours**
5 Watt Device	104 hrs
13 Watt Device	40 hrs
25 Watt Device	20.75 hrs
42 Watt Device	12.25 hrs
60 Watt Device	8.65 hrs
72 Watt Device	7.25 hrs
85 Watt Device	6.1. hrs
100 Watt Device	5.2 hrs

*Device wattage does not factor in warm up periods, which may have larger amperage draws for short periods of time. This is common in HID lighting.

**Hour runtime based on maintaining 50% battery capacity and are continuous hours of operation without charge. A safety factor of 6.5aH is included in these calculations to account for unforeseen loss in real world scenarios to provide accurate runtime without damaging the battery bank of the unit.

Trailer: The RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G comes mounted on a durable and ruggedly constructed pyramid style trailer that is designed with both toughness and ease of use in mind. The trailer features a removable tongue, spring axles and four retractable 1000 pound manual crank leveling outriggers for safe and secure job location deployment. The solar panels are mounted to the powder coated desert tan pyramid enclosure and have a slider system that allows them to be open during operation and slid over each other for safer transit. For long term deployment scenarios, the tongue can be removed by pulling out a retention pin and removing the tow cables before pulling the tongue straight out for a smaller footprint, and to reduce the chance of theft during deployment. The pyramid

enclosure also offers operators plenty of room for logos and advertisements if so desired. The pyramid enclosure carries a NEMA 3R weatherproof rating. The top of the pyramid enclosure is fully removable for easier maintenance access and to allow operators to more easily install their security equipment within the housing.

Deployment: The deployment process on the RNT.A-SPG366A-600-STRB.RB-MS-BC.120V-W4G is simple and can be done by a lone operator. Once the trailer is towed to the desired location, it is disconnected from the towing vehicle. The retractable outriggers are then extended and used to level the trailer. The wheels coming off the ground during this process is not unusual. The tongue can also be removed at this point if the unit is being used for a lengthy deployment. Once leveled, the operator then pulls out the safety retention pin on the solar panel slider and slides the front solar panel all the way to the right before replacing the pin. The solar panels are angle adjustable and should be adjusted to an angle that will allow them to absorb the most sun light at this point.

Once the trailer is leveled and the solar panels are successfully deployed, the operator will open the access door on the compartment and turn the system controls switch to the on position after making sure the mast drain valve is closed. Once the unit is powered on and the drain valve is closed, the operator can turn the air compressor switch to the on position to raise the equipment mast.

The silent operation aids in high profile security applications. Solar power generators offer a low maintenance alternative to traditional diesel powered generators that require refueling and a qualified diesel mechanic to maintain and/or repair them.

We offer a wide variety of options to customize this solar generator driven light plant, including 120/240V outlets, LED light heads, cameras, antennas, access points, network equipment, additional battery and panel capacity. We also offer other customizations including taller masts and stainless steel assemblies for saltwater applications.

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)

There are no Faqs



Image:



Image:



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Image:

Product ID: 330257

Export Control Classification Number (ECCN): EAR99

Options:

-Rental Length
Example: -MR

Rental Length	
MONTHLY	-MR
WEEKLY	-WR
DAILY	-DR

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