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LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM

1920W High Intensity LED Light Plant - 30' Electric Mast, (4) LED Lights - 8kW Diesel Generator, 230V 50Hz

Product ID: 311713

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.

LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM 1,920 Watt Five Stage LED Light Tower

Mast Specs

Mast Length: 8.83` to 30`
Total Extended Height (w/ Light Heads): 32`
Total Collapsed Height (w/ Light Heads): 11` 1/4"
Capacity: 200 lbs
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: 3,500lbs Electric Winches
Cable: 3/16 Aircraft Cable
Winch Voltage: 230V AC, 50 Hz
Mounting: 48" x 48" x 54.5" Carbon Steel Cube Frame
Transport Dimes (w/ Light Heads): 48"-L x 48"-W x 133"-H
Footprint (Outriggers Extended: 102" x 102"
Mast Head: 96" x 2" x 2" - 1/4" Thick

Genset Specs

Engine: Kubota
Engine Speed: 3600 RPM
No. of Cylinders: 3
Generator: 8KW Marathon Pancake Brushless Alternator
Voltage: 230V AC 1PH, 50 Hz
Battery 12V
Fuel Cell Capacity: 73 Gallons

Summary

11` to 32` Total Height
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Electric Operation
(4) 4` Slide-Out Outriggers w/ 1,200lb Jacks
PLR Electric Mast Control
NRTL Certified to UL 508A
200` 10/4 Cable w/ Cord Reel

LED Lights Summary

ETL Listed US & Canada
135 Lumens Per Watt Efficiency
80,000+ Lamp Life
Corrosion Resistant Aluminum Housing
Multiple LED Banks for Heat Dispersion
98% Transmission High Purity PMMA Optics
Field Serviceable Light Fixtures
IP67 Rated Waterproof

Fuel Delivery: Electric

Noise Level: Db level 71 @ 23 ft.

Lamp Specs

Lamp Type: LED

Lamp Qty: (4) 480W LED Fixtures
Total Watts: 1,920W
Total Lumens: 259,200 lms

Voltage: 230V AC, 50 Hz

Lighting Configuration: 10° Spot, 25° Wide Spot, 38° Narrow Flood, 60° Flood or 90° Wide Flood

Luminous Efficiency: 130 lm/w

Color Temp: 5600K, 70-CRI

Lamp Life: 80,000+ Hours

Light Operation: Timer, Photocell Day/Night Sensor, Manual

Wiring: 200` 10/4 SOOW Cord
Cord Cap: 230V

Cross: Popa PL DG 2 Light Tower

Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Shipping: Common Freight

Special Orders - Special Requirements
Contact us for special requirements

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The Larson Electronics LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM Skid Mount Electric Light Plant provides a safe and effective way for operators to quickly deploy 1,920 watts of intense lighting to elevations up to thirty feet. The four 480 watt LED lamps produce a wide spread of intense white light, allowing this unit to cover large work areas with high quality illumination. The light tower features a rotating boom that allows for 360° of rotation, a removable mast head for storing mounted equipment when not in use, 4-corner outriggers for leveling and stabilization and 200` line in cable with a manual cord reel management drum. The system is mounted to a cube frame with skid pockets and 4-corner pick eyes for easy transportation.

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

The LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM five stage telescoping steel light mast with electric winch from Larson Electronics' is designed to quickly and safely deploy 1,920 watts of intense LED lighting in locations where elevated illumination is needed for maximum area coverage. This light boom can be extended to 30` for maximum area coverage and collapsed to 11` 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 elevated using an included 3,500 lbs electric winch with 3/16" galvanized braided cable.

LED Lights: Included with this light tower are four of our wet area suitable GAU-LTL-500W-LED high output LED fixtures producing a combined total of approximately 259,200 lumens at 1,920 watts. Each light head contains Fifty-four 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 25° 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. Each floodlight is securely fastened to the light boom and each lamp includes a support bracket to help maintain lamp stability within its housing. The lamps are connected to the power source via a water tight male connector that extends from the junction box attached to the mast head and attaches to a mating female connector, providing power to the LED light fixtures.



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Heat Management: Heat is the single largest factor in premature LED failure and color shifting. These LED units feature individual heat sinks per bank of six LEDs to control heat buildup rather than utilizing a single housing to dissipate heat. This allows for more thorough cooling of the LEDs for extended operating periods. This allows the LEDs to be driven at up to 90% capacity without overheating or visible loss of light output. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 80,000 hours.

Durability: As well as unparalleled heat control, the GAU-LTL-500W-LED series of LED lights from Larson Electronics also offer 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.

Technology: The LED light heads on this unit features multiple LED drivers which helps to increase the operational life of the fixture. With traditional LED lights, in the event an LED array or driver fails, the entire fixture no longer illuminates. This new series of LED lamps contains twelve individual LED boards configured in a series of banks. In the event of a driver failure, only one bank of LEDs will be effected while the other banks will continue to operate. Unlike some LED manufacturers where an LED failure in the circuit will cause the entire circuit to cease operator, each light emitting diode in these light fixtures will operate independently and are not affected by the operate of neighboring diodes. In the event of an individual LED failure, the mating LEDs will continue to operate.

The GAU-LTL-500W-LED series high output LED light fixtures are unique in design in that they are field serviceable. Most manufacturers require sending the complete fixture in for service or repair and will not sell replacement parts or authorize local repair on LED fixtures due to the complexity of the fixture and internals. We have designed these light fixtures to allow for field serviceability. Each GAU-LTL-500W-LED is comprised of nine LED "strips," and each "strip" contain six encapsulated LEDs paired with individual high purity optics. In the event of damage to a fixture, instead of returning the fixture to the factory for repair, these "strips" can be replaced in the field by an electrician. Should an individual "strip" be damaged, the remaining "strips" will continue to function as normal until repairs can be made. This reduces overall downtime.

Light Emitting Diodes: 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.



Click Photo to Enlarge



Click Photo to Enlarge

Skid Tower: The tower and assembly are powder coated with glossy blue finish for corrosion resistance and aesthetics. This mast is bolted onto a 1/8" thick carbon steel plate via six 1/2" anchor bolts. The mast and controls are secured within a cube-style frame constructed of 2" by 2" by 1/8" thick and measuring 48" wide by 48" long by 54.5" tall. Four 4.25` slide out outriggers with 1,200 lbs manual crank leveling jacks allow operators to anchor the unit down, providing stability during deployment. Eight skid pockets allow this unit to be picked up from all four sides, and four-corner pick eyelets allow for stable deployment via crane operation. A 96" 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 four LED light fixtures.

The LM family of telescoping towers feature a proprietary mast guidance system, which provide increased stability during high winds. This light plant system can withstand winds up to 125+ mph when lowered to 11`, and up to 55 mph when fully extended. 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 in either direction. The mast can be positioned in one of four different directions, and locked back in place by re-tightening the T-handle. The mast itself spins freely and can be rotated with a single hand.

The electric winch on this mast is offered in 230V AC 50 Hz. Additional voltage options are available at an additional charge. Larson Electronics can offer single phase and three phase AC winches, or low voltage DC winches.

Electric Winch Operation: The LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM features an electric winch to raise the four LED light heads to the 30` maximum elevation point. Many similar masts provide "visual indicators" such as a red line on the final stage of the mast to indicate when to stop elevating the mast. If the operator is not paying attention, elevating past this point can cause damage to the mast or possibly fully eject the mast out of the lower stages and potentially cause physical damage to surrounding areas and equipment. Larson Electronics equips their series of electric skid masts with a programmable logic relay to stop the mast from further elevating once the full extended height is reached. This PLR system will not allow an operator to overextend the skid mast in the field, so there is no need to watch for visual indicators and no risk associated with missing and extending past the visual indicator.

Mast Controls: The mast is operated via push button switches within the cube frame, allowing operators to raise or lower the mast with the push of a button. All controls and electronics are housed within an aluminum NEMA 3R control panel. The lights are banked on two individual circuits, with the left half of the lights on one circuit and the right half on another, allowing operators to power two fixtures at 960 watts or all four fixtures at 1,920 watts depending on the lighting requirements. All electrical components are UL/cUL listed.

Generator: The LM-30-8-5S-4X500LTL-LED-EW-8KWDG-SM mobile light tower incorporates a long list of impressive features. The diesel engine is a water cooled Kubota that operates at 3600 rpm. This engine features key operated electric starting, a full twelve volt electrical system, automatic low oil pressure and high

temperature safety shutoffs, dual fuel filters and easy access oil and radiator drain ports to facilitate maintenance. The 8KW generator is a single bearing design and produces 230V current at 50Hz. The generator uses a four wire hookup system with an external ground allowing for setting up both electrical and mechanical safe grounding systems.

Wiring & Cord Cap: This skid mounted LED flood lighting system is equipped with 200 feet of 10/4 chemical and abrasion resistant SOOW cord that is fitted with an industrial grade 230V cord cap for easy connection to local electrical circuits. Cable management is provided via a manual roll up drum mounted within the steel cube frame that provides storage for the 200` power cable when not in use or during storage.

Larson Electronics can custom tailor these units to the customer's requirements with longer sections and larger mounting plates. For example, the LM-25 is another model that reaches to a length of 25 feet, with a 15 foot lower section and a 10 foot upper section and a 4 foot wide upper mounting bracket. We also offer a choice of either the manual 1,000 lbs hand winches included standard or optional electric winches.

Suggested Applications: Temporary lighting, construction sites, and security camera deployment. We can equip this mast with 1000W or 1500W Metal Halide lights or a wide variety of high powered LED lights with comparable power, including the LED10WSA-160, LEDLB-200X2E, LEDLB-160X2E or LEDLB-80x2E.

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)

Export Control Classification Number (ECCN): EAR99

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