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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

LM-SMDE-30-8-5S-4X500LTL-LED-EW-RD-E2E

1920 Watt Electric Winch LED Light Plant - Skid Mount 5 Stage Mast - Extends to 30' - Daisy Chain

Product ID: 105185



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-SMDE-30-8-5S-4X500LTL-LED-EW-RD-E2E 1,920 Watt LED Light Plant
Lamp Type: LED
Lamps: (4) 480 Watt LED Fixtures
Total Watts:1,920
Total Lumens: 259,200
Mast Length: 8.83 feet - 30 feet
Capacity: 150 lbs.
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: 2,500lbs Electric Winch
Cable: 3/16 Aircraft Cable
Winch Voltage: 120V or 240V AC 50/60 Hz
Mounting: 48" x 48" x 53" Carbon Steel Cube Frame
Shipping: Common Freight

Lamp Specs
Lamp Type: LED
Voltage: Universal 100-277 VAC, 50/60Hz
Lighting Configuration: Flood Pattern
Temp Rating: T5 -40°C to +65°C
Color Temp: Cool White 5500-5600K, 70-CRI
Lamp Life: 80,000+ Hours
Outlet/Cord Cap: Twist Lock - L14-30P and L14-30C
Wiring: 150` 10/4 SOOW Cable
Cable Management: Manual Crank Cord Reel
Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Quick Summary
Mast Summary
8.83` to 30` Foot Light Mast
Steel Construction
Power Coated Finish
Removable Mast Head
125 mph Wind Resistance
Electric Operation
(4) 4` Slide-Out Outriggers w/ 1,200lb Jacks
Made in the USA

LED Lamp Head Summary
ETL Listed US & Canada
Dial-in Adjustability per light head
80,000+ Lamp Life - 98% Transmission Optics
Corrosion Resistant Aluminum Housing
Multi-Bank LED System for Failsafe Performance
70% Lumen Retention after 80,000 Hours
Daisy Chain up to (3) Towers Together on 240V
UL 508A

Special Orders- Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-214-616-6180
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

This unit is Made In USA - Manufactured in Texas

The Larson Electronics LM-SMDE-30-8-5S-4X500LTL-LED-EW-RD-E2E skid mount LED 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 effectively 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, an electric winch for easy deployment, and is mounted to a cube frame with skid pockets and 4-corner pick eyes for easy transportation. Each assembly is equipped with 150` of 10/4 SOOW cable and up to three units can be daisy chained together on 240V.

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

The LM-SMDE-30-8-5S-4X500LTL-LED-EW-RD-E2E 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 8.83` for applications where a footprint smaller 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, a lower section 6.04` in length and 5" by 5" by 3/16" thick, a middle section 6.19` in length and 4" by 4" by 1/8" thick, an upper section 6.34` in length and 3" by 3" by 1/8" thick, and a 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 2,500 lbs. electric winch with 3/16" galvanized steel cable.

LED Lights: Included with this light tower is one 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. The light head contains forty-eight 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 spot 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 stainless steel support bracket to help maintain lamp stability within its housing. The lamps are hard wired into a NEMA 3R panel located on the end of the telescoping boom.

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.

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. In addition, should

an LED failure occur, these LED flood lights are field serviceable. Each bank of six LEDs can be replaced with the fixture installed. This allows for the tower to stay in operation until repairs can take place, and eliminates the need to remove and disassemble the entire fixture for repairs.

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 80,0000 hours of use. We use these LED lights for 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-400W-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-400W-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.



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Skid Tower: The tower and assembly is powder coated with glossy blue finish for corrosion resistances and aesthetics. 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 53" tall. Four 4` slide out outriggers with 1,200 lbs. manual crank leveling jacks allow operators to anchor the unit down, providing stability during deployment. Four 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 50" 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 provides increased stability during high winds. This light plant system can withstand winds up to 125+ mph when lowered to 8`, 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 with ease 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 with ease, and can typically be rotated with a single hand.

The electric winch on this mast is offered in 120V or 240V AC 50/60 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-SMDE-30-8-5S-4X500LTL-LED-EW-RD-E2E 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.

Wiring & Cord Cap: This skid mounted LED flood lighting system is equipped with 150` of 10/4 chemical and abrasion resistant SOOW cord that is fitted with an industrial grade 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. Each end of this 150` 10/4 SOOW cable is terminated in L14-30 cord caps. Operators can utilize the build in cord reel to extend electrical power connections when in remote locations electrical connections are up to 150` away, or bypass this cord reel and plug directly into the L14-30P cord cap whip from the panel when the light tower is mounted closer to power sources. A single unit can be ran on a 120V circuit or up to three units on a 240V circuit.

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 since1973. 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.

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 GAU-LTL-500W-LED, LED10WSA-160, LEDLB-200X2E, LEDLB-160X2E or LEDLB-80X2E.









Frequently Asked Questions (FAQ)