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WCDE-LE-15KW-4X320LTL-LED-M2

30' Portable LED Light Tower - 15kW Diesel Generator w/ 50 Gal Tank, (4) 320W LED Lamps, 200A 1PH Panel/Camlocks - Trailer Mount

Product ID: 310938



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.

Made in Texas - Made in USA, BAA Compliant

WCDE-LE-15KW-4X320LTL-LED-M2 Mobile Light Tower

Engine Specs:
Engine: Perkins (if available)
Engine Type: Diesel, Liquid Water Cooled, EPA Final Tier 4
Engine Speed: 1800 RPM
No. of Cylinders: 4
Horsepower: 40 HP
Rated Prime Power: 15 kW

Fuel System Specs:
Tank Type: Polyethylene Tank
Fuel Capacity: 50 Gallons
Runtime: 80 Hours for LED Lights, 40 Hours Full Load
Fuel Consumption Gal/Hr: -
Exterior Fill Port Diameter: 3.5"

Cooling/Lubrication System Specs:
Air Filter: Dry Type Cartridge
Oil Filter: Full Flow, Spin-on
Service Interval: 750 Hrs

Generator Specs:
Generator: Brushless
Alternator: Cummins

Protection
Made in USA, Made in Texas
BAA Compliant
Buy American Act Compliant
FAR 52.225-2 compliant
15 kW Genset
50 Gallon Fuel Capacity
30' Fold Over Mast
Low Oil, High Engine Temp Auto Shut-Off
Four Point Outrigger System
Steel Trailer w/ Industrial Grade Paint Finish
(4) LED Fixtures
Independently Adjustable Light Heads
164 Lumens Per Watt Efficiency
Withstands 65 Mph Winds at Full Extension
98% Transmission High Purity PMMA Optics
70% Lumen Retention after 80,000 Hours
Multiple LED Banks for Heat Dispersion
Rear Located Engine Controls, Lighting Controls
Lift-up Enclosure w/ Hydraulic Lift Assist Arms for Engine Access and Fuel Tank
Engine Controls and Lighting Controls Located Behind Hinged Door w/ Viewing Window

Voltage: 120/240V, 1-phase, 60Hz

Efficiency Rating: 89.2

Voltage Regulation: +/-1% Voltage Regulation

Battery: Wet Cell

Exhaust: CARB (California) Compliant, EPA Tier 4 Final Compliant

Fuel Filter: Included w/ Replaceable Element

Control Specs:

Control Panel Type: External, Illuminated Control Panel w/ Sealed Switches

Switch: 4-position, Key Activated - Off, Run, Glow, Start

Meter: Digital Hour Meter

Light Control: Individual On-Off Switch for Each Light Fixture

LED Breakers: 15A Breakers per Circuit

Panel Specs:

Panel Type: 1PH 200A

Camlocks: (1 Set) 150A 15 Series Red, Black, Blue, White, Green [600V]

Light Mast Specs:

Mast Type: Manual Crank-Up, Fold Over

Boom Height: Up to 30`

Boom Rotation: 360° Range of Motion, Adjustable from Ground during Full Extension, Rotation Lock

Materials: Aluminum

Finish: Powder Coated Black

Operation: Dual Winch System

Winch: 1,500 lbs - Self-Braking

Cord: Self-retracting Coiled Mast Cord

Wind Rating: 65 mph

Light Specs:

Lamp Type: LED

Lamp Qty: (4)

Total Watts: 1,280W

Single-lamp Watts: 320W

Total Lumens: 166,400 lms

Single-lamp Lumens: 41,600 lms

Luminous Efficiency: 164 lm/w

LED Color Temperature: Cool White - 5500-6500K

LED Life Expectancy: 80,000 hours

Beam Angle: 60° Flood

Optics Efficiency: 98% - PMMA High Transmittance Optics

Ambient Temperature Range: -40°C to +80°C

Materials: Die Cast Aluminum w/ Powder Coated Black Finish

Mounting: Trunnion Mount U-Bracket

Waterproof Rating: IP67 LED Lights

Coverage: 2 Acres, 87,120 ft2

Trailer/Housing Specs

Enclosure Type: Durable, steel vented housing customized to store, protect and maximize functionality of power generation, power storage and light tower components

Enclosure Material: 14ga Sheet Steel

Trailer Finish: Galvanized

Dimensions: 145" L x 60" W x 88" H
Max Towing Weight: 3,600 lbs
Height Adjustment: Hitch Up and Down
Hitch: Reversible 2" Ball Hitch
Wheelbase: 60"
D Rings: (4) Side of Trailer
Forklift Pockets: (2) Trailer Base for Low Point Access Lifting
Pickeye: (1) Crane Hook Pickeye for High Point Access Lifting
Safety Chains: 7,800 lb Safety Chains with Spring Loaded Safety Hooks for Connecting to Tow Vehicle
Tongue: Removable w/ (1) 1000lb manual crank tongue jack
Outriggers: (4) 2ft Extending Stabilizing Outriggers w/ 1000 lb Manual Crank Jacks
Axle: (1) 5000 lb Axle
Fenders: Steel
Brake System: Electric
LED Lighting: DOT Approved Tail, Side, Brake, Directional and License Plate LED Lights
Wheels: (2) 16" Steel Rims
Tires: (2) ST235/80R16 High Capacity Trailer Rated Tires
Maximum Tow Speed: 55 mph

Shipping Dimensions: -
Weight: -

Special Orders - Special Requirements

Contact us for special requirements

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Made in Texas

The WCDE-LE-15KW-4X320LTL-LED-M2 Portable LED Light Tower from Larson Electronics is a towable lighting package powered by a 15 kW generator. This system features a 30' telescoping mast with manual winch operation for elevating four LED floodlights. With four 320-watt lamps producing 166,400 total lumens, this unit will illuminate a 2-acre outdoor area continuously without refueling for 80+ hours with lights only and 40 hours at full load. This mobile light tower is made in USA (made in Texas) and is BAA compliant.

The WCDE-LE-15KW-4X320LTL-LED-M2 mobile light tower is a powerful lighting solution for outdoor, remote locations. This unit is supported by a water cooled, diesel generator which supplies the current to four 320-watt LED lamps producing 41,600 lumens each for a combined total of 166,400 lumens of light. The light mast can provide 80+ hours of continuous illumination, at extended heights up to 30 feet.

This mobile floodlight package is ideal for emergency services, large scale event illumination, construction, mining, industrial operations and anywhere an extended operation capable mobile lighting solution is needed. The system is FAR 52.225-2 compliant, Buy American Act Compliant and BAA compliant.

Generator: With engine speeds of 1,800 rpm, the four-cylinder unit is capable of generating 15 kW prime power during use. As a low-rpm generator, it operates quieter than 3,600 rpm "throw-away" models. Because 3,600 rpm generators have higher speeds, the units wear out faster and require less copper during operation.

The WCDE-LE-15KW-4X320LTL-LED-M2 is equipped with a 50-gallon polyethylene fuel tank. It features single-phase 120/240V, as well as a 4-position key activated switch (off, run, glow and start). This unit will automatically shut down in the event of an abnormal condition related to low oil pressure and high coolant pressure. This system comes with an hour meter and glow plugs.

Panel and Camlocks: An included 200-amp single-phase panel is available for power connections. The panels features one set of 600V, 150-amp 15 series camlocks (red, black, blue, white and green).

Lights: The lighting system on this unit is comprised of four, 320-watt LED lamps producing 41,600 lumens of light each attached to the end of the telescoping light boom. These floodlights produce a wide flood light pattern with a combined total of 166,400 lumens of light and can be rotated 360 degrees. Each floodlight is securely fastened to the light boom and each lamp includes a support bracket to

help maintain lamp stability within its housing. Each light has its own on/off switch. The lamps have a 60° flood beam angle configuration for wide area illumination in outdoor areas.

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 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 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.

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.

Light Controls: Operators can access individual on/off controls for individual fixtures. These LED floodlights are protected by a 15-amp breaker per circuit.

Telescoping Boom: The fold-over telescoping boom extends up to 30 feet through the use of a dual, self-braking winch and allows for rotating the lights 360 degrees. The telescoping boom is capable of withstanding 65 mph winds when extended to its full height and the stabilizing outriggers are deployed.

Housing: All of the operating components are housed within a protective compartment constructed of 14ga sheet steel with a galvanized finish, which is designed to provide airflow for cooling. Side wing doors provide access to the interior while latches provide secure closing when the unit is in use. The entire unit can be loaded and unloaded onto trucks via forklift skid pockets at the bottom of the system or four D rings. The entire unit is mounted onto a two-wheel trailer with a 2,200 lbs leaf spring axle. A standard 2" ball hitch and two standard safety chains allow for easy hookup and towing. The stop, tail, turn and license plate lights are LED. Maximum towing speed is 55 mph.

Applications: This portable generator is suitable for use in remote locations, such as temporary camps, construction sites, military bases and areas without reliable access to the grid. It can be utilized to power a wide range of heavy duty tools and equipment, including laptops, portable machines and mobile devices. The unit’s robust recharging options offer flexibility in environments where access to reliable power sources are severely limited.

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.

Summary of Specifications:

Diesel Fueled Light Tower

Fuel System

• Tank usable fuel volume 50 US gal
• Fuel filter with replaceable element
• Polyethylene tank
• Liquid cooled

Power Generation System

• 60 Hz Engine/Generator
• Electric Brushless
• Up to 15 kW output (Standby)
• 120/240V AC

Electrical System

• Minimum 30A start limit breaker (ensuring no load conditions exist at start-up)
• Individual floodlight/LED circuits with 15A breakers
• Wet cell battery
• Key activated power switch
• Individual ON-OFF switch for each light fixture
• Automatic shutdown for low oil pressure and high coolant temperature
• Hour meter
• Wiring sized and fused to required amperage draw
• 200A panel with one set of 15 series camlock receptacles

Trailer and Housing

• Durable, steel vented housing customized to store, protect and maximize functionality of power generation, power storage and light tower components
• Galvanized trailer finish
• Towing specifications and requirements – 2” ball size, wheelbase 48” to 60” overall dimension of 145” long, 60” wide, 88” high
• Maximum towing weight- 3600 pounds
• 4 per unit “D” rings to secure unit for transport
• Forklift pockets on trailer base for low point access
• Crane hook pocket on mast for high point access
• LED stop, tail, turn, brake and license plate lights and all applicable lighting and reflective requirements for highway usage
• High capacity trailer rated tires
• Trailer brake package
• Safety chains
• Straight removable tongue for shipment or storage
• 2" ball hitch
• Minimum 4 outrigger jacks for stability and safety
• 55 mph maximum tow speed

Light Tower

• Light towers that extends to 30’
• 65 mph wind rating
• Mast has rotation capabilities that can be rotated and locked into position
• (4) 320W LED Flood lights per unit. Minimum total of 41,600 initial lumens per unit.









Frequently Asked Questions (FAQ)