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WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL

25' LED Light Tower - 20kW Diesel Gen - (4) LED Lamps - 220V/50Hz - (2) Aux LED Towers - Red

Product ID: 152984

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.

WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL Mobile Light Tower

Genset Specs:

Engine: Perkins/404D-22G EPA Tier 4
Engine Type: 4-cycle, Water Cooled, Direct Injection, Natural Intake
Engine Speed: 1800 RPM
No. of Cylinders: 4
Rated Power: 20 kW
Rated Standby Output: 22 kW
Rated Amps: 100A
Generator: Stamford PI144D
Voltage: 220V 50 Hz
Battery 12V @ 60Ah
Fuel Cell Capacity: 25 Gallons
Fuel Delivery: Electric
Receptacles: (2) for Aux LED Light Towers
Noise Level: Db level 65 @ 23 ft
Color: Fire Brigade Glossy Red

Light Mast Specs:

Mast Type: Electro-Hydraulic
Boom Height: Up to 25`
Materials: Aluminum
Operation: Dual Winch System

Ratings

20kW/100A Perkins Genset
25 Gallon Fuel Capacity
19+ Hours of Continuous Illumination
External Grounding
Low Oil, High Engine Temp Auto Shut-Off
Deepsea Controller
Four Point Outrigger System
Steel Trailer w/ Industrial Grade Paint Finish
High Output LED Lamps
328,000 Total Lumen Output
Independently Adjustable Light Heads
Individual Light Switch Circuit Breakers
Dial-in Adjustability per light head
130 Lumens Per Watt Efficiency
Withstands 50Mph Winds at Full Extension
98% Transmission High Purity PMMA Optics
70% Lumen Retention after 80,000 Hours
Multiple LED Banks for Heat Dispersion
(2) Aux LED Light Towers
Fire Brigade Glossy Red
Tilt/Rotate Switches
Complies w/ ISO, JIS, DIN, BSS, ASTM, EUCS, NFPA Standards

Stages: Four

Features: Coiled Mast Cord, (1) Lifting Eye and Fork Pockets

Light Specs:

Lamp Type: Bridgelux® LED

Total Watts: 1,600 (400W per lamp)

Total Lumens: 208,000 (52,000 per lamp)

Luminous Efficiency: 130 lm/w

LED Color Temperature: Cool White - 5500-6500K

LED Life Expectancy: 80,000 hours

Optics Efficiency: 98% - PMMA High Transmittance Optics

LED Drive %: 90%

Power Factor: >97%

Mounting: Stainless Steel Trunnion Mount U-Bracket

Materials: Die Cast Aluminum Housing, Acrylic Optics

Housing Color: Natural Aluminum

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

Waterproof Rating: IP67
Coverage: 6 to 7 Acres
Panel Controls: Tilt, Rotate, Voltage Regulation

Auxiliary LED Tower Specs:
Lamp Type: CREE LED - (2) LED Light Towers

Dimensions: 7` to 12` Adjustable Tower
Voltage: 220V AC 50 Hz
Total Watts: 1,000W (500W per Lamp)
Total Lumens: 120,000 (60,000 lm per Lamp)
Luminous Efficiency: 120 Lm/W
Lamp Life: 80,000+ Hours
Color Rendering Index: >75 CRI
Beam Angle: 10° Spot, 24° Wide Spot, 38° Narrow Flood, 60° Flood, or 90° Wide Flood
LED Color Temperature: Cool White - 5600K
Optics Efficiency: 98% - PMMA High Transmittance Optics
Power Efficiency: >90%
LED Drive %: 90%
Amperage: 2.27A @ 220V
Ambient Operating Temp Range: -40° C to +80°C
Housing Materials: Die Cast Aluminum Housing, PMMA Optics
Mounting: 1/8" Thick, Aluminum Square Tube Tripod - 168" Height
Wiring: (2) 50-meter Cords
Cord Management: (2) Electric Cord Reels - Detachable

Color: Fire Brigade Glossy Red

Trailer Specs:
Materials: 14ga Sheet Steel Enclosure, 12ga Formed Steel Chassis
Hitch: 2" Ball Hitch & 3" NATO Pintle hitch
Finish: Industrial Grade Paint
Axle: (1) 2,200 lbs
Suspension: 2,000 lbs Double Eye Leaf Springs
Brakes: Auto Reversing, Cable Operated Drum Brakes Fitted w/ Hand Lever Parking Brake

Outriggers: (4) Adjustable Outriggers w/ 2,000 lbs Manual Leveling Jacks

Accessories: Stabilizer Jacks, Towing Hook
Lighting: DOT Approved tail, side, brake, and directional lights

Wheels: (2) 13" 5x4.5 Steel Rims

Tires: 155R13

Dimensions: 137" x 93.3" x 53.9"

Weight: -

Special Orders - Special Requirements
Contact us for special requirements

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Made in Texas

The WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL mobile light tower from Larson Electronics is a towable lighting package powered by a 20 kW generator. With four, 400-watt lamps producing 208,000 lumens, this unit will illuminate a 6-7 acre area continuously without refueling for 19+ hours. A Deepsea controller is available for monitoring the real-time status of the IP65-rated unit. The primary LED light tower is supported by two, fire brigade glossy red auxilliary LED light towers, which emit 60,000 lumens of white light each and come with 50-meter cords managed by electric cord reels.

The WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL mobile light tower package is a powerful lighting solution for outdoor, remote locations. Equipped with two auxilliary LED light masts, this unit is supported by a 4-cycle, water cooled, direct injection, natural intake Perkins/404D-22G engine (diesel), which supplies the current to four, 400-watt LED lamps producing 52,000 lumens each for a combined total of 208,000 lumens of light. The light mast can provide 19+ hours of continuous illumination, at extended heights up to 25 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.

With engine speeds of 1,800 rpm, the four-cylinder unit is capable of generating 22 kW on standby and 20 kW during prime use (rated @ 100 amps). 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-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL is designed to support 220V 50Hz and features five power outputs and an ATS plug. This unit will automatically shut down in the event of an abnormal condition related to water temperature, engine oil pressure, low coolant, low DEF, overspeed and overcrank. An emergency stop switch allows operators to manually shut down the system.

Lights: The primary lighting system on this unit is comprised of four, 400-watt LED lamps producing 52,000 lumens of light each attached to the end of the telescoping light boom. These floodlights produce a wide flood light pattern capable of illuminating a 6 acres with a combined total of 208,000 lumens of light. 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 pin connector that attaches to a receptacle located on the end of the telescoping boom.

Operators are provided access to switches on the unit for controlling the LED light heads. Light head rotation is facilitated by a single toggle switch. Moving the switch up rotates the light heads in a clockwise manner, while moving the switch down rotates the light heads in a counter-clockwise manner. The second toggle switch adjusts the tilt of the LED lamps (up and down). Voltage regulation is facilitated by a rotary knob on the panel. All switches are clearly labeled to prevent misuse and accidents.



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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. 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 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 Bridgelux® 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.
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.

Controls: A DSE3110 Deepsea controller provides operators with a wide viewing panel and robust monitoring of the brushless generator. The system displays frequency, battery voltage, runtime and more. A protective feature notifies operators about low oil pressure, high water temperature, over/under voltage and over/under speed. The controller can be used in manual or auto start mode. Configurable timers and alarms provide flexibility and real-time monitoring of the system.



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Telescoping Boom: The telescoping boom consists of four sections extending up to 25 feet through the use of an electroc-hydraulic elevation system to extend the mast and allows for rotating the lights 360 degrees. The telescoping boom is constructed of aluminum to resist rusting and corrosion and is capable of withstanding 50 mph winds when extended to its full height and the stabilizing outriggers are deployed. The stabilizing outriggers are a four-point design with one located under the trailer tongue, two on the sides and one on the back of the unit. The two side outriggers are adjustable and include 2,000 lbs swivel jacks for leveling and stabilizing the tower.

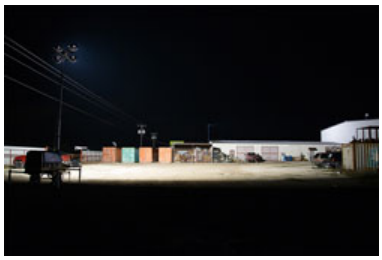


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Housing: All of the operating components are housed within a protective compartment constructed of 14 gauge steel and designed to provide airflow for cooling. Side wing doors provide access to the interior while latches provide secure closing when the unit is in use. The design and construction of this enclosure helps this unit operate at a low 65 Db noise level @ 23 ft. The entire unit can be loaded and unloaded onto trucks via

forklift sleeves mounted to the top section of the light mast. The entire unit is mounted onto a two-wheel trailer with a 2,200 lbs leaf spring axle. A standard two inch ball coupling and two standard safety chains allow for easy hookup and towing.


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Auxiliary LED Towers: The WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL comes with two powerful Larson Electronics tripod-mount LED light towers. Powered by two outlets on the generator, the single-lamp units provide a total of 120,000 lumens of light output. The LED light heads, each containing forty-eight CREE® high output LEDs producing 1250 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.

The auxiliary LED towers are equipped with 50-meter cords (managed by electric cord reels, which can be attached to the telescopic mast) for connection to the primary LED light tower with a diesel generator.

The portable LED light masts are both equipped with a single adjustable LED light head mounted atop a three leg tripod fabricated from powder coated aluminum. This adjustable and collapsible tripod can be extended to twelve feet, collapsed to seven feet, and includes solid wheels allow the operator to tilt the unit back and simply roll the entire assembly to a new location when fully deployed. The LED light fixture assembly can be removed by releasing the hand knob and sliding the light and mounting bracket off of the center support while the legs can be collapsed, aiding in deployment, storage and transport. The lamp can be easily adjusted vertically and locked into position.

Trailer: The two-wheel trailer contains suspension and road gear for ease of use. This single-axle unit features auto reversing, cable-operated drum brakes, which is fitted with a hand lever parking brake. Equipped with DOT-approved lights (tail, side, brakes and directional vehicle lights), operators are provided access to stabilizer jacks and a towing hook.

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.





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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)

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Product ID: 152984

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL-Beam Angle

Example: WCDE-4-20KW-220V.50HZ-4X500LTL-LED-CPR-2XQP.500LTL-10SP

Beam Angle	
10° SPOT	-10SP
25° WIDE SPOT	-25WS
40° NARROW FLOOD	-40NF
60° FLOOD	-60F
90° WIDE FLOOD	-90WF

Links (Click on the below items to view):

- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**