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WCDE-20KW-6X300LTL-LED-2.L09-1.L22-2.N10-50HZ

20kW Diesel Generator - 30' Telescoping Tower - (6) 300W LED Lamps - 60 Gal Fuel Cell, 400V 3PH 50Hz

Product ID: 308587

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-20KW-6X300LTL-LED-2.L09-1.L22-2.N10-50HZ Mobile Light Tower

Genset Specs:

Engine: Kubota D1105-BG
Engine Speed: 1800 RPM
No. of Cylinders: 3
Total Displacement: 1.826L (111.4 cu. in.)
Intake System: Turbo Charged
HP: 31.3 HP
Fuel Type: Ultra Low Sulfur Diesel
Fuel Cell Capacity: 60 Gallons
Fuel Consumption: 0.34Gal/hr @ 25% Load, 0.68Gal/hr @ 50% Load, 1.50Gal/hr @ Full Load
Alternator Current: 60A
Cranking Current: 167A
Generator: Marathon 283PSL1716 20kW Brushless
Voltage: 400V, 3PH 4W4P
Frequency: 50Hz
Voltage Regulation: AVR Controlled
Voltage Regulator: SE350
Insulation Class: H
Coolant Capacity: 7.75 Quarts
Oil Capacity: 6 Quarts
Emergency Stop: Included

Light Mast Specs:

Mast Type: Manual Crank-Up
Boom Height: Up to 30`
Materials: Aluminum
Operation: Dual Winch System
Winch: 1,500 lbs - Self-Braking
Stages: Four
Features: Coiled Mast Cord, (1) Lifting Eye and Fork Pockets

Light Specs:

Lamp Type: LED
Lamp Qty: (6)
Total Watts: 1,800W
Total Lumens: 243,000
Luminous Efficiency: 135 lm/w
Beam Configurations: 60° Flood

Protection

Made in the USA
20 KW Kubota Brushless Genset
60 Gallon Fuel Cell
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
243,000 Total Lumen Output
Independently Adjustable Light Heads
Individual Light Switch Circuit Breakers
Dial-in Adjustability per light head
135 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
TAA Compliant
Buy American Compliant
Manufactured in Texas
NRTL Certified to UL 1640

LED Color Temperature: 5000K
LED Life Expectancy: 80,000 hours
Materials: Die Cast Aluminum Housing, PMMA Optics
Housing Color: Powder Coated Black
Ambient Temperature Range: -40°C to +80°C
Waterproof Rating: IP67

Trailer Specs:
Materials: 14ga Sheet Steel Enclosure, 12ga Formed Steel Chassis
Hitch: 2" ball hitch
Finish: Industrial Grade Paint
Axle: (1) 2,200 lbs
Suspension: 2,000 lbs Double Eye Leaf Springs
Outriggers: (4) Adjustable Outriggers w/ 2,000 lbs Manual Leveling Jacks
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-20KW-6X300LTL-LED-2.L09-1.L22-2.N10-50HZ mobile light tower from Larson Electronics is a towable lighting package powered by a 20kW generator. With six, 300-watt lamps producing 243,000 lumens, this unit will illuminate a 8-9 acre area continuously without refueling for extended hours. The light tower extends to a maximum height of 30 feet. A Deepsea controller is available for monitoring the real-time status of the unit.

The WCDE-20KW-6X300LTL-LED-2.L09-1.L22-2.N10-50HZ mobile light tower is a powerful lighting solution for outdoor, remote locations. This unit is supported by a 20,000 watt generator, which supplies the current to six, 300-watt LED lamps producing a combined total of 243,000 lumens of light. The light mast can provide 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.

An included 20kW generator equipped with a 31.3 HP motor provides power for the LED lights. The diesel engine is a Kubota unit that operates at 1800 rpm. This engine with turbo charged intake features AVR controlled voltage regulation and carries a Class H insulation rating. A 60 gallon fuel tank allows the engine to operate continuously for extended periods of time without refueling. The 20,000 watt generator is a single bearing design and produces 400V 3PH, 50 Hz power.

LED Lights: This system features six 300-watt LED lights for illumination. Each light produces 40,500 lumens of high intensity light while drawing only 300 watts. Twenty-four high output LEDs producing 1,687.5 lumens each are arranged in rows and paired with PMMA high purity optics to produce a 60° flood beam spread. 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.

LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. 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 is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb

type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.
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 WCDE-20KW-6X300LTL-LED-2.L09-1.L22-2.N10-50HZ 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.

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.
Telescoping Boom: The telescoping boom consists of four sections extending 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 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.
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.
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.

Frequently Asked Questions (FAQ)