

WCDE-4-8KW-4X300W-LED

8,000 Watt Generator - Water Cooled Diesel Engine - 30' Telescoping Tower - 4 LED Fixtures

Product ID: 70011

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-4-8KW-4X300W-LED Mobile Light Tower

Power: KUBOTA Water Cooled Diesel Engine

Lamps: 4- 300 watt LED Lamps

Total Lamp Watts: 1,200 watts

Total Lumens: 118,320

Efficiency: 98.6 lm/w

Generator: 8000 watts, 120V/240V @ 60hz, 1800rpm

Noise Level: Db level 63 @ 23 ft

120V Auxiliary Power: 20A NEMA 5-20R Type Duplex Receptacle

240V Auxiliary Power: 30A NEMA L6-30R Type Twist Lock Receptacles

Fuel: 30 Gallon Polyethylene Fuel tank w/ 3 1/2" fill port

Run Time: 60 Hours on a Single Tank of Fuel

Boom Height: Up to 30 Feet

Coverage: 4 to 6 Acres

Mounting: Towable Trailer, 3500 lb Axle

Hitch Type: 2" Ball Coupling or 3" Pintle Eyelet

Weight: 2,100 (No Fuel)

Protection

External Grounding

Low Oil, High Engine Temp Auto Shut-Off

Three Point Outrigger System

Hour Meter - Alternator Warning

Individual Light Switch Circuit Breakers

Withstands 65Mph Winds at Full Extension

Special Orders - Special Requirements

Contact us for special requirements

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Made in Texas

The WCDE-4-8KW-4X300W-LED mobile light tower from Larson Electronics is a towable lighting package powered by a water cooled diesel engine turning a single bearing 4 pole generator which produces 8,000 watts and

120/240V@60Hz. With four 300 watt LED lamps producing 118,320 lumens this unit will illuminate a 4-6 acre area continuously without refueling for 60 hours.

The WCDE-4-8KW-4X300-LED mobile light tower is a self contained towable light tower package that produces enough light to illuminate an area up to 6 acres in size. This unit contains a water cooled diesel engine powering a 8,000 watt generator, which supplies the current to four 300 watt LED lamps producing 29,580 lumens each for a combined total of 118,320 lumens of intense white light. This unit can run uninterrupted for 60 hours straight without refueling and includes a telescoping light mast which can elevate the four IP68 rated LED lamps to a height of 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.



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The WCDE-4-8KW-4X300W-LED mobile light tower incorporates a long list of impressive features. The diesel engine is a water cooled Kubota that operates at 1800 rpm. This engine features key operated electric starting, a full twelve volt electrical system, automatic low oil pressure and high temperature safety shut-offs, dual fuel filters and easy access oil and radiator drain ports to facilitate maintenance. A 30 gallon polyethylene fuel tank allows the engine to operate for 60 hours continuously without refueling. The 8,000 watt generator is a single bearing design and produces 120/240 volt current at 60 Hz. The generator uses a four wire hookup system with an external ground allowing for setting up both electrical and mechanical safe grounding systems.



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Lights: The lighting system on this unit is comprised of four 300 watt [LEDP5W-60-1227](#) lamps producing 29,580 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 minimum of 4 acres with a combined total of 118,320 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.

Durability: As well as unparalleled heat control, the LEDP5W-60 series of LED lights from Larson Electronics also offer IP68 rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40 degrees Celsius to 80 degrees Celsius, are waterproof to three meters, and resist ingress of dust, dirt and humidity. The housings are formed from extruded aluminum and the lenses are unbreakable polycarbonate. The CREE XLamp XPG® LEDs help these units achieve 15.6Grms rated resistance to vibrations and are rated at 70% lumen maintenance after 50,000 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.

Heat Management: Heat is the single largest factor in premature LED failure and color shifting. These LED units contain advanced drivers which use pulse width modulation to control heat buildup rather than simple voltage regulators which are typically harsh on sensitive electronics and can contribute to early LED failure. These units automatically sense the temperature of each LED and adjust the energy frequency or "duty cycle" accordingly to maintain heat levels within acceptable ranges. This system in essence flashes current at an extremely fast on and off rate to each LED based upon the LED's core temperature. This flash rate is too fast to detect with the human eye, but provides precise control of the current flowing to each LED and thus the heat it generates. This allows the LEDs to be driven at up to 90% capacity without overheating or visible loss of light output. The LEDs are always driven at the same voltage but the duty cycle, however, is changed to alter how long the LEDs are actually on or off. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 50,000 hours.



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Controls: The operations system for this unit is a centrally located control panel within the light tower enclosure. Four circuit breaker protected switches allow individual control of the lights while an individual hour meter tracks unit operating time. Also included is an alternator warning light, fuel primer system, preheating switch, 120 volt GFCI duplex receptacle for auxiliary power takeoff and a 240V twist lock power receptacle.

Telescoping Boom: The telescoping boom consists of three sections extending up to 30 feet through the use of two manual self braking winches and allows for rotating the lights 360 degrees. One winch is mounted to the trailer tongue and acts to raise the tower into a vertical position while the other is mounted to the boom and is used to extend the tower to the desired height. The telescoping boom is constructed of galvanized steel to resist rusting and corrosion and is capable of withstanding 65 mph winds when extended to its full height and the stabilizing outriggers are deployed. The stabilizing outriggers are a three point design with one located under the trailer tongue and two on the rear sides of the unit. The two side outriggers are adjustable and include 3,000 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 doors provide access to the interior while latches provide secure closing while the unit is in use. The design and construction of this enclosure along with the commercial grade muffler system helps this unit operate at a low 63 Db noise level @ 23 ft. The entire unit can be loaded and unloaded onto trucks via forklift sleeves mounted to the outer section of the light mast. The entire unit is mounted onto a two wheel trailer with a 3,500 lbs leaf spring axle. Hitch options include standard two inch ball coupling or 3" pintle eyelet and the tongue is equipped with two standard safety chains allow for easy hookup and towing.

Engine:
Kubota Liquid Cooled Diesel Engine
60 Hz Engine/Generator
Industrial engine exhaust system
Rubber engine mounts isolate engine and generator from trailer frame

Cooling system capable of operating at 120°F ambient temperature
Full flow spin on oil filter
Fuel filter w/ replaceable filter element
Dry type cartridge air filter
30 Gal. Polyethylene fuel tank with 3 1/2" fill port

Trailer:
Mast Supports: 5" x 3/16" square tube
Tongue: 47" removable tongue w/ 2" ball hitch or 3" pintle hitch
Chassis: Tubular 2.5" x 3/16" steel chassis
Leveling Jack: (3) 3000lb adjustable leveling jacks
Outriggers: Side outriggers provide 8' 3" span
Side Fenders: 14 gauge steel
Axle: 3500 lb leaf spring axle
Tires: P205/75L15
Safety chains w/ s-hooks
DOT approved tail, side, brake, and directional lights
Recessed rear and side lights
License plat holder w/ license plate lights
51" axle span

Mast:
3 section tubular galvanized steel mast - 30' maximum extension
UHMW glide pads on all sides of mast tubes
Horizontal Automatic locking system for transport
1500 lb automatic self-braking winch
359° mast rotation w/ locking system
Retractable coil cord w/ galvanized cord protection housing

Frequently Asked Questions (FAQ)









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Product ID: 70011

Warranty: 36 Months

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- [Operations Manual](#)
- [SpecSheetArabic](#)
- [SpecSheetFrench](#)
- [HigResPic1](#)
- [HigResPic2](#)
- [HigResPic3](#)
- [HigResPic4](#)
- [HigResPic5](#)
- [HigResPic6](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)