

RNT-WCDE-49-16X1500

***RENTAL* Larson Electronics Megatower™ - 16 X 1500W MH - 2,400,000 Lumens- 50' Height -**

RENT

Product ID: 105016

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.

RNT-WCDE-49-16X1500 Megatower™ 24000

Genset Specs:

Engine: Perkins 1104D-44TG1
Engine Type: Vertical, liquid-cooled, 4-cycle diesel engine
Engine Speed: 1800 RPM
No. of Cylinders: 4
Aspiration: Turbocharged
Air Cleaner: Heavy Duty Replaceable Dry Element
Generator: 55KW Brushless
Voltage: 120/240V Single Phase
Battery 12V
Fuel Cell Capacity: 100 Gallons - External Tank w/ Anti-Splash Baffles
Fuel Delivery: Electric
Sound Level: 74 dB - Full load @ 23' away
Cold Weather Package: Glow Plugs
Outlets: (1) 5-20RA (GFCI), (1) L5-30R, (1) L14-30R, (2) CS-6369

Features

2,400,000 Lumen Output
Four Point Outrigger System
Powered Boom Deployment
Extreme Area Coverage
55KW Perkins Brushless Genset
100 Gallon External Fuel Cell
Cold Weather Package Factory Installed
Up to 27 Hour Continuous Operation
58' Light Mast
High Output Metal Halide Lamps
Independently Adjustable Light Heads
Dial-in Adjustability per light head
110 Lumens Per Watt Efficiency
Switched Breaker System per Lamp Head
Steel Trailer w/ Industrial Grade Paint Finish
6-Point Leveling Jack System
Made in the USA

Light Mast Specs

Tower Length: 22' to 58'
Lamp Qty: (16)
Materials: Heat Treated 6063B/T5 Aluminum
Finish: Powder Coated

Operation: Pneumatic w/ Hydraulic Ram

Light Specs:

Lamp Type: Metal Halide

Lamp Quantity: 16

Total Watts: 24,000 (1,500W per lamp)

Efficiency: 110 Lumens per Watt

Total Lumens: 2,400,000

Coverage: 10+ Acres

Run Time: Up To 27 Hours on Single Tank of Fuel -Approximate

Controls Specs

Line-In Voltage: 240/120V or 208/120V

Line-In Cable: 20` 10/4 SOOW Cable

Panel: NEMA 3R w/ Breakers

Trailer Specs

Materials: Steel

Trailer Dimensions: 21`-L x 7`-W trailer bed

Height (Mast Collapsed & Upright): 21`-9/32"-H

Height (Mast Extended): 58`-H

Footprint (Outriggers Extended): 34`-3/4" x 12`-9/16"

Hitch: 3" Lunnett

Wiring: 7-Pin Flat

Axles: 7,000 lbs w/ Electric Brakes

Suspension: Leaf Spring

Outriggers: (4) 6" x 6" x 6" I-Beams Retractable w/ (4) 7,000 lbs Manual Leveling

Wheels: (4) 16" 5x4.5" Steel Rims

Tires: (4) P235/80R16

Special Orders - Special Requirements

Weight:

Shipping: Common Freight

Shipping Weight:

Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Rental Type: Monthly, Weekly, Daily

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

E-mail: sales@larsonelectronics.com

This unit is for rentals.

The RNT-WCDE-49-16X1500 Megatower™ 24000 from Larson Electronics is a high power lighting package powered by a 24kw brushless water cooled diesel generator. The sixteen 1500 watt metal halide lamps included with this unit produce a combined total of 2,400,000 lumens and will illuminate a 10+ acre area continuously without refueling for up to 27 hours.

The RNT-WCDE-49-16X1500 Megatower™ 24000 is a self contained, towable, high power light tower package that produces enough light to illuminate an area 10+ acres in size. This unit contains a water cooled diesel engine powering a 55KW generator, which supplies the current for sixteen 1,500 watt metal halide lights producing 150,000 lumens each, for a combined total of 2,400,000 lumens of light. This unit can run uninterrupted for up to 27 hours straight without refueling and includes a telescoping light mast which can elevate the sixteen metal halide lamps to a height of 58`. This light boom can be extended to 58` for maximum area coverage, and collapsed to 22`

for applications where a footprint smaller is required. The tower is constructed of heat treated aluminum tubing with 2.69` foot of overlap per section. The mast is elevated using an included hydraulic ram, and extended to its full height using a trailer mounted air compressor.

This mobile floodlight package is ideal for large scale event illumination, construction, mining, industrial operations, and anywhere a mobile full power lighting system capable of extended operation is needed.



[Click Photo to Enlarge](#)

Genset: The RNT-WCDE-49-16X1500 mobile light tower includes a Perkins genset that houses a Perkins 1104D-44TG1 turbocharged diesel engine that powers the 55KW 120/240 brushless generator. This genset is liquid cooled and features a single phase generator with electric start ignition. The diesel generator runs at 1800 RPM. A 100 gallon fuel cell sits beside the genset and is equipped with an electric fuel delivery system. The fuel cell is constructed of single a heavy gauge steel single wall frame with internal anti-splash baffles. This genset features key operated electric starting, a twelve volt electrical system, liquid cooling, replaceable dry element air cleaner, and a full enclosure for safe operation and protection against the elements. This engine also features cold weather glow plugs to improve performance under cold weather conditions.

Lights: The lighting system on this unit is comprised of sixteen 1,500 watt metal halide lamps producing 150,000 lumens of light each attached to the end of the telescoping pneumatic light boom. These floodlights produce a wide flood light pattern capable of illuminating a minimum of 10 acres with a combined total of 24,000 watts and 2,400,000 lumens of light. The entire lighting assembly is connected to the power source via a precision light controller ballast and breaker box.

[Click here to see the lighting layout comparison of the metal halide verses LED Megatower light plants from Larson Electronics.](#)

Telescoping Boom: The pneumatic telescoping boom is constructed of heat treated aluminum with an powder coated finish and extends up 58` in height. This boom is raised from and lowered to the folded position by a single hydraulic ram, and extended or retracted by pnumaitc system with equipped air compressor.



[Click Images to Enlarge](#)

Wiring/Controls: The light heads are grouped into banks of four. Each bank is wired into the NEMA 3R breaker control box at the base of the mast. Operators control the light heads via an on/off switched breaker per bank of four light heads. The air compressor and battery charger are also powered from within this breaker box. Power is provided to the control box via a 20` 10/4 SOOW whip with flying leads for connected to terminal mount gensets. Operators supply 240/120V or 208/120V (depending on the configuration) to the light plant. The mast elevation is controlled by a push button switch to operate the hydraulic ram, allowing operators to raise the mast to the upright position. The vertical deployment is operated by an up/down level, allowing operators to extend it to its full 50` height or retract it to the collapsed height. The entire unit is mounted onto a four wheel, tandem axle trailer constructed of 8" box

steel equipped with axles. Each axle is rated at 7,000 lbs and equipped with P235/80R16 tubeless tires and wheels. The rear axle is equipped with electric brakes. Tongue weight is rated at 650 lbs and an adjustable 3" lunnett eye for pintle hitches provides secure hookup to tow vehicles. A single 7,000 lbs rated tongue jack provides a stable connect-disconnect platform as well as additional stability during tower deployment. Standard heavy duty safety chains are included. This trailer also includes a front mounted storage area for stowing tools and accessories. The trailer is finished in industrial grade Dupont™ paint for protection against rust and corrosion and provides an attractive finish. Overall dimensions of the entire trailer and boom assembly in the stowed for travel configuration is 21' long by 7' wide.

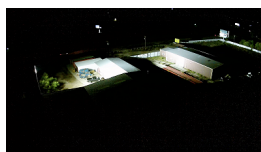
Six 7,000 lbs hand crank jacks are used for raising the trailer up off the ground, and four 7,000 lbs hand crank jacks mounted on extending outriggers are used for leveling and stabilizing the trailer assembly. Each of the four jacks are attached to a pivoting outrigger constructed of 6' by 6" by 6.3" steel I-beams. The jacks can be leveled by hand crank or attachment provided for power drills. These outriggers can be extended 6' out from the side of the trailer for added stability. This light plant can withstand 35 mph winds when fully extended. When lowered to 30', the mast can withstand 50 mph winds. When lowered to 22', the mast can withstand wind speeds up to 95 mph with gusts of 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.

We offer a choice of finishing, equipped light heads, and with or without gensets. These towers can be fitted with Larson Electronics line of high output light heads, or customize the mast head to meet the mounting requirements for your equipment. Optional diesel generators and fuel cells can be equipped from factory, or retrofitted after purchase.



[Click Images to enlarge.](#)

The above images show a side by side comparison of the light output between our LED light plant and a traditional four lamp metal halide light plant. The left image shows the metal halide light plant raised to 30' and illuminating a 50,000 sq ft work area with four 1000 watt metal halide light fixtures. The right image shows the LM-SMWB-HLM65-20X500LTL-LED-SYNC light plant raised to 50', illuminating the same 50,000 square foot work area with twenty 500 watt LED fixtures. Notice how the color and intensity of the work area is greatly improved when lit up by the LED fixtures.



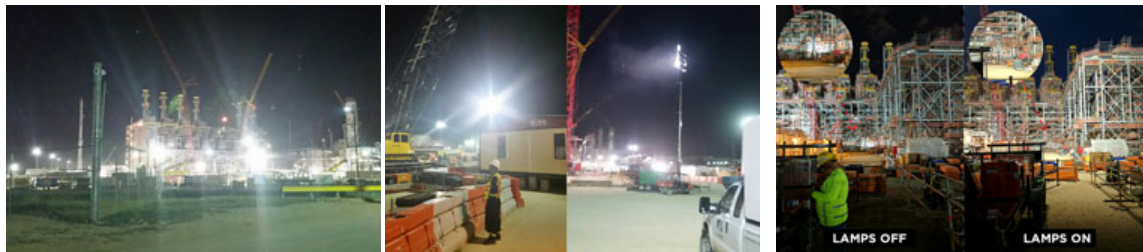
[Click Images to enlarge.](#)

The left image above shows the light mast illuminating a 300,000+ square foot area. The yellow billboard in the image reaches 40 lux, while the fence at the tree line (500'+ away from the tower) reaches 35 lux. This image was taken from 50' behind the mast and at 100' above ground level. The image to the right shows the work space 75' in front of the mast, with the entire area work area reaching over 100 lux. The mast was extended to 35'.

The left image above shows the same 300,000+ square foot area being illuminated. In the background you can see a vehicle with their headlights on, barely able to be seen in comparison to the LM-SMWB-HLM65-20X500LTL-LED-SYNC light plant. This image was taken at 80' to the right of the mast and 175' above ground level. The mast was extended to 35'. The image on the right is a Google Earth export of the physical area being illuminated, for scale purposes.

Cold Weather Package: The RNT-WCDE-49-16X1500 is designed to withstand extreme cold environments and harsh winters. The pneumatic system is equipped with a de-icing system to prevent the air compressor, air lines, and pneumatic mast from freezing from moisture building within the air system. This de-icing system uses an environmentally friendly (non-toxic) fluid. All air lines are equipped with cold weather rated hydraulic hoses rated for -65°C and fitted with metallic hardware. The air compress consists of an oil-less unit equipped with an aluminum air regulator, stainless steel ball valves, and stainless steel valve controls. The head of the air compressor is

wrapped with heat trace to prevent the compressor from freezing over in subzero temperatures. All the pneumatic controls are housed within an insulated and weather tight enclosure. This pneumatic control box features 1/2" thick polystyrene foam insulation and heat trace.

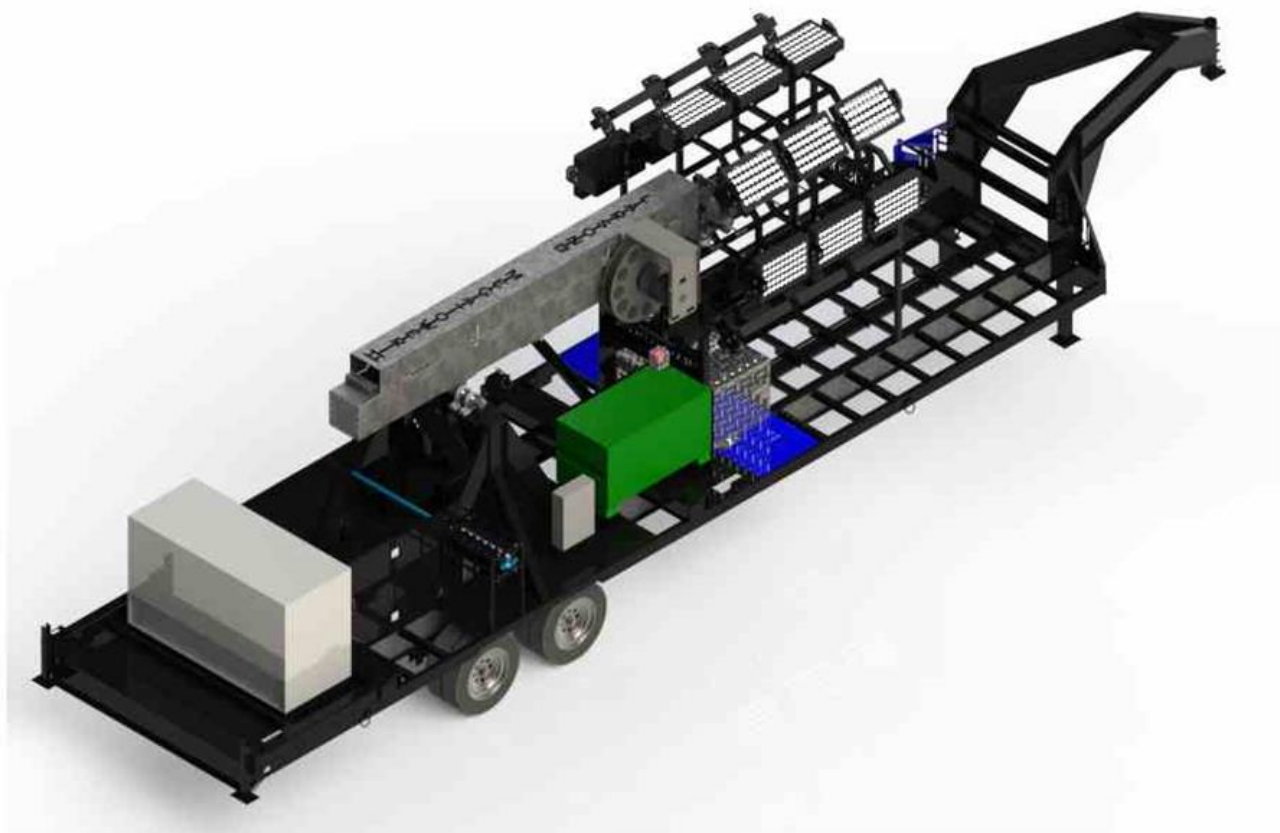


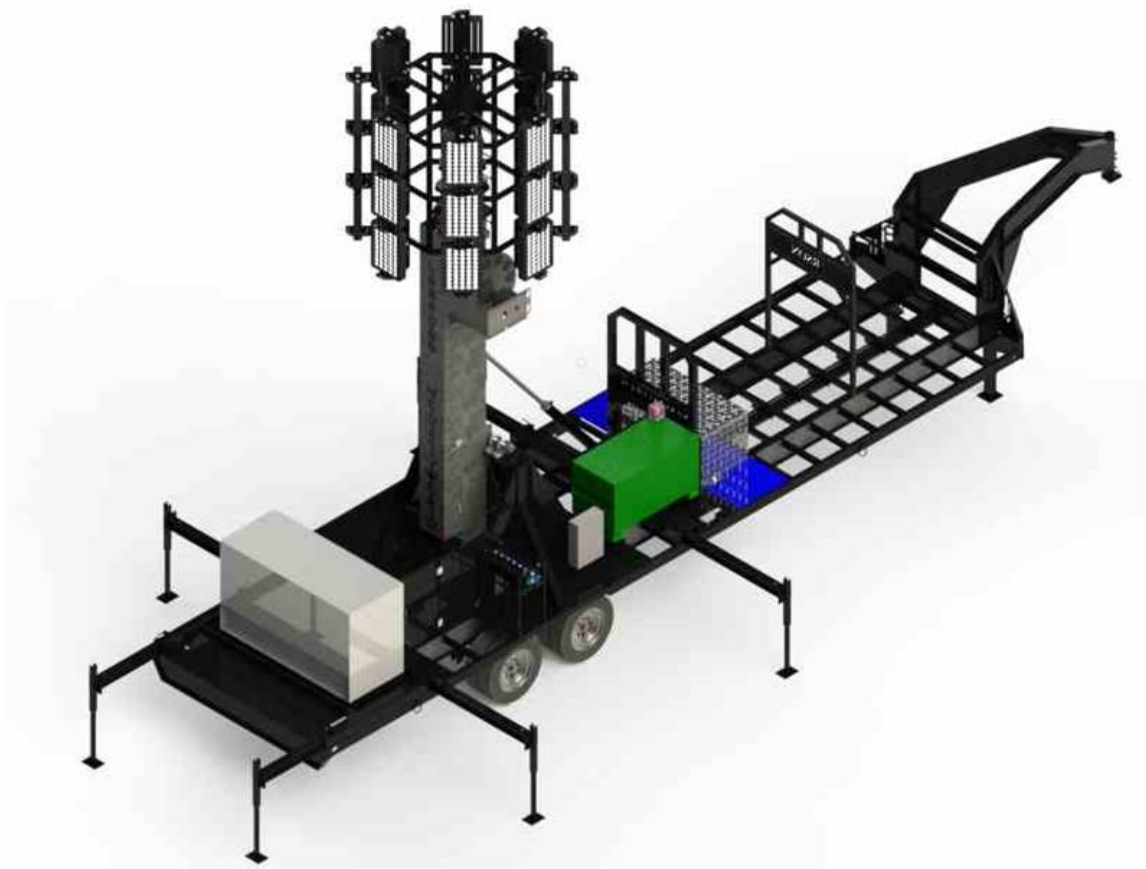
[Click Photos to Enlarge](#)

The hydraulic system features -65°C cold weather rated rubber hydraulic hoses with metallic fittings and a cold weather rated high viscosity hydraulic fluid. The battery system that powers the hydraulic system features a cold weather rated sealed acid glass mat 12 volt battery wrapped in a heated battery blanket. A cold weather rated battery charger keeps the 12 volt battery charged. All battery components are enclosed within a NEMA 3R housing. All electrical components are wired using cold weather rated SOOW cable with rated to -50°C that features high flexibility, and extreme abrasion, acid, oil, and water resistance even in sub-zero climates.

Suggested Applications: Temporary lighting, construction sites, and security camera deployment. We can equip this mast with 1000W HID-22-SL-REM or 1500W HID-22-15M-SL-REM Metal Halide lights or a wide variety of high powered LED lights with comparable power, including the [GAU-LTL-600W-LED](#), [LED10WSA-320](#), [LEDP5W-60](#), and [GAU-HB-160LED](#).

Frequently Asked Questions (FAQ)









RNT-WCDE-49-16X1500

Product ID: 105016

Export Control Classification Number (ECCN): EAR99

Options:

RNT-WCDE-49-16X1500-Rental Length

Example: RNT-WCDE-49-16X1500-MR

Rental Length	
MONTHLY	-MR
WEEKLY	-WR
DAILY	-DR

Links (Click on the below items to view):

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