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WCDE-11-HLM65-40XORS-LED

65' Hydraulic Megatower™ on 21' Trailer - (40) 150W LED Lights - 11KW Genset w/ 110 Gallon Tank

Product ID: 146032

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.

This unit is Made In USA - Manufactured in Texas

WCDE-11-HLM65-40XORS-LED Trailer Mounted LED Megatower™

Genset Specs:

Genset: Kubota GL11000TM
Engine: Kubota D722 16.3 HP
Engine Type: Vertical, liquid-cooled, 4-cycle diesel engine
Engine Speed: 3600 RPM
No. of Cylinders: 3
Generator: 11KW 2-Pole Brushless
Voltage: 120/240V Single Phase
Battery 12V @ 36aH
Fuel Cell Capacity: 110 Gallons - External Tank w/ Anti-Splash Baffles
Fuel Delivery: Electric
Sound Level: 68 dB - Full load @ 23` away
Cold Weather Package: Yes - Factory Included

Light Mast Specs

Tower Length: 22` to 65`+ (Total Height of 74` w/ 9` of Light Assembly)
Lamp Qty: 40
Materials: Heat Treated 6063B/T5 Aluminum
Finish: Powder Coated
Operation: Hydraulic

Quick Summary

11KW Kubota Brushless Genset
110 Gallon External Fuel Cell
Cold Weather Package Factory Installed
Up to 43 Hour Continuous Operation
22` to 58` Light Mast
Hydraulic Aluminum Mast
Steel Construction Trailer
Hydraulic Mast Operation
Powered Boom Deployment
High Output LED Lamps
Extreme Area Coverage
Direct Replacement for (16) 1000W MH Light Plants
6,000W LED compared to 16,000W MH

640,000 Total Lumen Output

Independently Adjustable Light Heads
Dial-in Adjustability per light head
98% Transmission High Purity PMMA Optics
Multiple LED Banks for Heat Dispersion
107 Lumens Per Watt Efficiency
70% Lumen Retention after 80,000 Hours

Switched Breaker System per Lamp Head

Light Head Specs
Lamp Type: Cree XHP35® LED
Total Wattage: 6,000W (150W per lamp)
Total Lumens: 640,000 (16,000 per lamp)
Voltage: Universal - 100-277V AC
Lighting Configuration: Flood Beam Pattern

IP67 Waterproof LED Fixtures
All Equipment Mounted on a 21` x 8` Trailer
Steel Trailer w/ Industrial Grade Paint Finish
Towable Height Under 13` w/ Light Heads
6-Point Outrigger System
10,000 lb Leveling Jacks

Powered Boom Deployment

Trailer Specs
Materials: Steel
Trailer Dimensions: 21`-L x 8`-W trailer bed
Height (Mast Collapsed): 9` 7"-H
Height (Mast Extended): 58`-H
Footprint (Outriggers Extended): 28`-6" x 19`-11"
Hitch: 3" Lunnett
Wiring: 7-Pin Flat
Axles: 7,000 lbs Torsion w/ Electric Brakes
Suspension: Torsion
Outriggers: (6) 6` x 6" x 6" I-Beams Retractable w/ (6) 10,000 lbs Manual Leveling Jacks
Wheels: (4) 16" 5x4.5" Steel Rims
Tires: (4) P235/80R16

Special Orders - Special Requirements

Contact us for special requirements

Weight:
Shipping: Common Freight
Shipping Weight:

Intl: 1-903-270-1187
Toll Free: 1-800-369-6671
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

This unit is Made In USA - Manufactured in Texas

The WCDE-11-HLM65-40XORS-LED from Larson Electronics is a Trailer Mounted Hydraulic LED Megatower™ that offers high output illumination and fuel savings over traditional light plants. This trailer mounted fold over 7-stage hydraulic light plant provides a safe and effective way for operators to quickly deploy forty 150 watt LED light heads to elevations above 65` (ground to mast head), reaching a total height of 74` (with 9` of light head assembly). This hydraulic light tower folds over for easy transportation, features a hydraulic ram upright assist, hydraulic mast and high output LED fixtures. The LED light tower is powered by an 11 KW Kubota diesel generator with a 110 gallon fuel tank. The entire assembly is mounted onto a 21` by 8` tandem axle trailer, allowing operators to transport this fold over boom from location to location. The WCDE-11-HLM65-40XORS-LED is a direct replacement for 1500W metal halide light plants.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO LIGHT MASTS OR LIGHT TOWERS

The WCDE-11-HLM65-40XORS-LED LED Light Plant is a self contained, towable, high power light tower package. This unit contains a water cooled diesel engine powering a 11KW Kubota generator, which supplies the current for forty 150 watt LED lights producing 16,000 lumens each, for a combined total of 640,000 lumens of light. This unit can run uninterrupted for up to 43 continuous hours without refueling and includes a hydraulic telescoping light mast which can elevate forty high output LED lamps to heights above 65`. The hydraulic tower is capable of reaching heights up to 74` with the light head assembly, which measures 9` in height. 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. This telescoping seven stage hydraulic light mast from Larson Electronics is designed to allow operators to quickly and safely deploy up to 6,000 watts of high intensity LED lighting in locations where illumination must be elevated to heights above 65` (from ground to mast head; 74` in total height with 9` light head assembly) for effective coverage. This light boom can be 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 second hydraulic system.

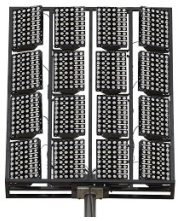


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A 90" wide by 109.5" tall and 2" by 2" by 1/4" thick steel mast head is attached to the upper section of the mast which provides a strong and stable platform for the forty 150 watt LED light heads.
Lights: The WCDE-11-HLM65-40XORS-LED Hydraulic LED Megatower™ from Larson Electronics features forty Osiris Cree XHP35 HD LED modules that each draw 150 watts. Each module uses twelve Cree XHP35 LEDs to provide operators with a source of brilliant LED illumination that is functional in a variety of different applications. Each module used in the WCDE-11-HLM65-40XORS-LED draws 150 watts of power for a total fixture wattage of 6000 watts. Each module produces 16,000 lumens at a color temperature of 5000K for an impressive lumen total of 640,000 lumens which provides operators with a superior lighting solution for even the most challenging areas to illuminate. To ensure even coverage of wide areas, the LED modules used on this hydraulic light plant are configured in Larson Electronics` even distribution pattern.
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.



Click Images to Enlarge



Durability: As well as unparalleled heat control, the Osiris series of LED lights used in the WCDE-11-HLM65-40XORS-LED 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 +85° Celsius, are waterproof, and resist ingress of dust, dirt and humidity. 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. The heat-sink on the Osiris LED modules has been engineered to provide optimum heat dissipation. Each LED module has been sized for proper passiving cooling to prevent premature failure of LEDs or color shifting and to eliminate the need for an active cooling system typically associated with high powered LED systems. Combined with the Cree XHP series LEDs, which have a higher ambient operating temperature range than standard LEDs, this allows the Osiris LED systems to be installed in real world applications without failure.
Telescoping Boom: The hydarulic telescoping boom is constructed of heat treated aluminum with a powder coated finish and extends extends above 65` in height from the ground to the mast head and 74` of total height with the light assembly (measures 9` in height). This boom is raised from and lowered to the folded position by a single hydraulic ram and extended or retracted by a second hydraulic system.
Wiring/Controls: The LED light heads are grouped into banks of four with ten total banks. Each bank in 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 hydraulics and battery charger are also powered from within this breaker box. Power is provided to the control box via an integrated 11KW genset. 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 a second push button switch allowing operators to extend it to its full 58` height or retract it to the collapsed height.



Click Photo to Enlarge

Genset: The WCDE-11-HLM65-40XORS-LED mobile hydraulic Megatower™ includes a Kubota Lowboy II GL11000TM genset that houses a Kubota D722 diesel engine that powers the 11KW 120/240V brushless generator. This genset is liquid cooled and features a single phase generator with electric start ignition. The diesel generator runs at 3600 RPM and is equipped with an EPA/CARB Tier 4 emissions system. A 110 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 options to improve performance under cold weather conditions.





Click Images to enlarge.
The above images show a side by side comparison of the WCDE-11-HLM65-40XORS-LED next to a 30` four lamp metal halide light plant.

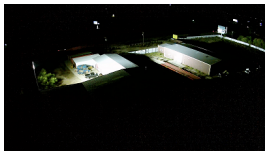
Trailer: The entire unit is mounted onto a four wheel, tandem axle trailer constructed of 8" box steel equipped with torsion axles. Each torsion axle is rated at 7,000 lbs and equipped with P235/80R16 tubeless tires and wheels. The rear axle is equipped with electric brakes. Tongue weight is rated at 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 8` 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.
Runtime: The forty 150 watt LED light heads have a considerably less amp draw than the metal halide light heads on traditional light plants. This allows the WCDE-11-HLM65-40XORS-LED to achieve up to 43 hours of continual use on a single tank of gas when only operating the light heads and air compressor. When running 24 hours a day and 7 days a week, this LED light plant will run for nearly 2 days straight without refueling. When the genset is running for 12 hours a day, this tower will provide on-site illumination for up to 4 days before needing more fuel. This self contained LED light plant provides operators with a worry free and energy efficient alternative to metal halide light plants.
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 WCDE-11-HLM65-40XORS-LED light plant raised to 50`, illuminating the same 50,000 square foot work area with forty 150 watt LED fixtures. Notice how the color and intensity of the work area is greatly improved when lit up by the LED fixtures.



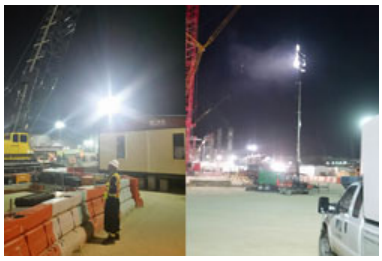



Click Images to enlarge.

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 WCDE-11-HLM65-40XORS-LED 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 WCDE-11-HLM65-40XORS-LED is designed to withstand extreme cold environments and harsh winters. The hydraulic system is equipped with a de-icing system to prevent the hydraulic lines and system from freezing from moisture building within system. This de-icing system uses an environmentally friendly (non-toxic) fluid. All hydraulic lines are equipped with cold weather rated hydraulic hoses rated for -65°C and fitted with metallic hardware. All the hydraulic controls are housed within an insulated and weather tight enclosure. This hydraulic control box features 1/2" thick polystyrene foam insulation and heat trace.
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.
The Kubota genset is retrofitted with a coolant heater to keep engine temperatures at optimum levels. The fuel system is equipped with an in-tank fuel heater to prvent gelling in arctic environments. The genset is equipped with 0W-40 synthetic oil. The genset`s electric battery is equipped with a battery blanket.


Click Photos to Enlarge

Suggested Applications: Temporary lighting, construction site illumination, outdoor event lighting, job site lighting and any other application that requires a self-contained source of illumination capable of covering a very large area effectively.
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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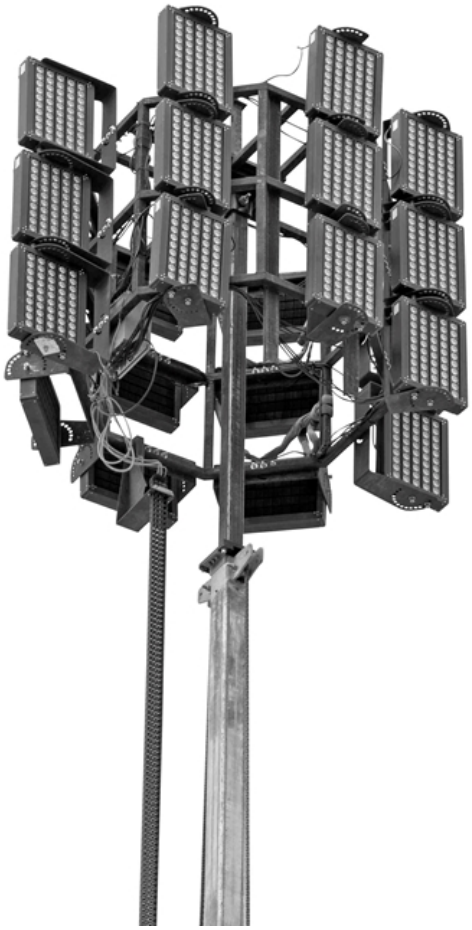
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WCDE-11-HLM65-40XORS-LED

Product ID: 146032

Warranty: 36 Months

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

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- **HigResPic1**
- **HigResPic2**
- **HigResPic3**
- **HigResPic4**
- **HigResPic5**
- **HigResPic6**
- **HigResPic7**
- **Video1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**