Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

WCDE-4-1XPTZ.2MP-2X150LTL-LED

25' Surveillance Light Tower w/ 6000W Generator - IP Camera & NVR - (2) 160W LEDs - 43200 Lumens

Product ID: 149437



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-4-1XPTZ.2MP-2X150LTL-LED Mobile LED Surveillance Tower

Genset Specs:
Engine: Kubota D1105-BG-ET01
Engine Type: Vertical, liquid-cooled, 4-cycle diesel engine
Engine Speed: 1800 RPM
No. of Cylinders: 3
Generator: Marathon Pancake 6KW 4-Pole Brushless
Voltage: 120/240V Single Phase

Auxiliary Power Supplies: 120V Duplex Receptacle, 240V Twist Lock
Battery 12V
Fuel Cell Capacity: 30 Gallons
Fuel Delivery: Electric

Noise Level: Db level 63 @ 23 ft.

Light Mast Specs:
Mast Type: Manual Crank-Up
Boom Height: Up to 25`
Materials: Galvanized Steel
Operation: Manual Hand Crank Winch
Winch: (2) 1500lb, Self-Braking
Stages: Three

LED Light Specs:
Lamp Type: Cree® LED
Total Watts: 320 (160W per lamp)

Protection
6KW Kubota Brushless Genset
30 Gallon Fuel Cell
Up to 120+ Hour Continuous Operation
External Grounding
Low Oil, High Engine Temp Auto Shut-Off
Hour Meter - Alternator Warning
High Output LED Lamps

Extreme Area Coverage

Direct Replacement for (4) 1000W MH Light Plants
320W LED compared to Higher Wattage MH
43,200 Total Lumen Output

Independently Adjustable Light Heads

Individual Light Switch Circuit Breakers

Dial-in Adjustability per light head
98% Transmission High Purity PMMA Optics
Multiple LED Banks for Heat Dispersion
150 Lumens Per Watt Efficiency
70% Lumen Retention after 80,000 Hours
IP67 Waterproof LED Fixtures
Steel Trailer w/ Industrial Grade Paint Finish

Three Point Outrigger System

Withstands 65Mph Winds at Full Extension

Total Lumens: 43,200 (21,600 per lamp)
Luminous Efficiency: 135 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: 1 to 2 Acres

Camera Specs

Camera Type: Security Camera

Dimensions: 14.38" H x 7.12" D

Camera Weight: 9 lbs

Total Watts: 25.5 (Max)

Voltage: 24V AC (PoE - 802.3at)

Image Sensor: CMOS

Connectors: 1.0Vp-p, 75 Ohm, BNC

Effective Pixels: 2.1 MP, 1920 x 1080 Resolultion
Min. Illumination: 0.02 Lux @ F1.6 AGC On, 0 Lux w/ IR
Electronic Shutter: 1 ~ 1/10,000s
Lens: 4.7-94mm Varifocal Lens
Angle of View: 58.3° (Wide) ~ 3.2° (Tele)
Optical Zoom: 20x
Day/Night: ICR
IR Distance: 492` (850 nm)
Video Framerate: 1080p @ 30fps
Video Offload: MP4
Video Output: (1) BNC

Language: English

Ambient Temperature Range: -22°F to 149°F

Housing Materials: Aluminum

Lens Material: Polycarbonate

Color: Beige/Black

Network Video Recorder Specs

Storage Capacity: 1 TB SATA Hard Drive
Channels: 8
Camera Resolution Support: Up to 8 MP
Installation Type: Plug and Play
Incoming/Outgoing Bit Rate: : 40 Mbps/80 Mbps
Frame Rate (fps): 60 fps per Channel
Recording Modes: Continuous, Schedule, Event, Motion Detection and VCA
Export Format: MP4
Video Outputs: (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (Front), (1) USB 3.0 (Rear)
PoE: = 120W, Supported Standards- 802.3af and 802.3at
Alarm Input: 4x (Rear Panel), Camera Dependent
Alarm Output: 1x (Rear Panel), Camera Dependent
Protocols: IPv4, TCP/IP, UDP, HTTP, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, ONVIF, HTTP Multipart
Materials: Aluminum

Trailer Specs

Materials: Plastic Enclosure, 12ga Formed Steel Chassis
Hitch: 2" Ball Coupler and 3" Pintle Hitch
Finish: Industrial Grade Paint
Axle: (1) 2,000 lbs.
Suspension: 2,000 lbs. Double Eye Leaf Springs
Outriggers: (4) Adjustable Outriggers w/ 2,500 lbs. Manual Leveling Jacks

Lighting: DOT Approved tail, side, brake, and directional lights

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

Tires: ST175/80/D13

Special Orders - Special Requirements
Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

E-mail: sales@larsonelectronics.com

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Made in the USA

The WCDE-4-1XPTZ.2MP-2X150LTL-LED from Larson Electronics is a Portable Surveillance Tower w/ IP Camera that is a towable, self-contained LED light plant powered by a water cooled diesel engine turning a single bearing 4 pole generator which produces 6,000 watts at 120/240V @ 60Hz. The two 160 watt LED lamps included with this unit produce a combined total of 43,200 lumens, which can illuminate a 1-2 acre area. This 320 watt LED lighting package is a direct replacement for metal halide light plants. This trailer mounted light tower and generator set comes equipped with a 30 gallon fuel tank that will run continuously without refueling for up to 120 consecutive hours. The WCDE-4-1XPTZ.2MP-2X150LTL-LED features a full-HD security camera that can be used to record images. Operators may store footage via a 1TB NVR.

The WCDE-4-1XPTZ.2MP-2X150LTL-LED mobile light tower is a self-contained towable surveillance light tower package that produces enough light to illuminate an area up to 2 acres in size while providing security coverage via security camera and NVR. This unit contains a water cooled diesel engine powering a 6,000 watt generator, which supplies the current to two 160 watt LED lamps producing 21,600 lumens each for a combined total of 43,200 lumens of light. This unit can run uninterrupted for 120 hours straight without refueling and includes a telescoping light mast which can elevate the four LED lamps to a height of 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.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

The WCDE-4-1XPTZ.2MP-2X150LTL-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 shutoffs, dual fuel filters and easy access oil and radiator drain ports to facilitate maintenance. A 30 gallon fuel tank allows the engine to operate for 120+ hours continuously without refueling. The 6,000 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.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

Security Camera: The monitoring device provides operators with crisp 1080p full-HD high resolution images. A 4.7-94mm varifocal lens automatically adjusts focus, providing operators with precise 20x optical zoom levels. Integrated long-range IR

LEDs, with a wavelength measurement of 850 nm, enable the day/night camera to see distances up to 492` under nighttime conditions. This unit offloads videos in MP4 format and features H.264 and MJPEG video compression.
The IP security camera is designed to perform in outdoor locations and rainy conditions. This IP66-rated unit resists the negative effects of non-corrosive liquids. De-fogging features enable the unit to operate in rainy and foggy conditions. This device is capable of operating in temperatures between -22°F and 149°F.
The security assembly comes with a 1TB, 8-channel network video recorder. Installation only takes minutes via plug-and-play, which automatically detects, displays and configures system components. With multiple recording modes (Schedule, Continuous, Motion Detection and Event), users could capture hours of footage with ease. The remote configurable network recorder features a bit rate of 40Mbps incoming and 80Mbps outgoing at up to 60fps per channel. To maximize storage, the unit supports H.265, H.264, and H.264 OVC video compression. The network recorder is compatible with two-way audio streaming (camera dependent) and includes 9 ethernet ports (RJ-45 interface). During recording, the unit handles the following data: activity log, email notification, event log, event notification, video analytics and event search. This device offloads videos in MP4 format.
Lights: The lighting system on this unit is comprised of two 160 watt LED lamps producing 21,600 lumens of light each attached to the end of the telescoping light boom. These floodlights produce a wide flood light pattern capable of illuminating 2 acres with a combined total of 43,200 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.
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 Cree® LEDs help these units achieve resistance to vibrations and are rated at 70% lumen maintenance after 80,000 hours of use. We use these LED lights for applications where a lot of vibration, dust, dirt, dampness and abusive working conditions are encountered.
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 Photo to Enlarge

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 25 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 51 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 rear outriggers are adjustable and include 1,000 lbs. swivel jacks for leveling and stabilizing the tower.
Housing: All of the operating components are housed within a protective compartment constructed of recyclable LMDPE (linear medium density polyethalene) plastic. This material is extremely corrosion resistant and retains its orignal appearance even after years of use. The enclosure is high impact crack resistant and retains resale value for longer than metal counterparts while also minimizing environmental impact. The highly durable plastic material is fully UV stabilized, contains long term antioxidants and is resistant to both high and low temperatures. The plastic enclosure of the WCDE-4-1XPTZ.2MP-2X150LTL-LED is significantly lighter than comparable metal enclosures while offering a more attractive appearance. A vertical lift door provides access to the interior while latches provide secure closing while the unit is in use. 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 2,000 lbs. leaf spring axle. A standard two inch ball coupling, three inch pintle hitch and two standard safety chains allow for easy hookup and towing.
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)