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LEDP10W-120ET-M

Magnetic Mount LED Light Bar - 12, 10-Watt LEDs - 10320 Lumens - 9-46 VDC - (3) 200lb Magnets

Product ID: 148204

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.

LEDP10W-120ET-M Magnetic LED Light Bar

Lamp Type: Cree XLamp MC-E® LEDs
Dimensions: 20.25"L x 2.5"H x 3.5"D **Weight:** 8 lbs
Watts: 120 Watts
Led Drive %: 90%
Voltage: 9-46V DC
Spot Beam: 825`L x 120`W
Flood Beam: 225`L x 240`W
Lighting Configuration: 20° Spot or 40° Flood
Mounting: Magnetic Mounting Bracket w/ (3) 200 lb. Magnets
Wiring: Deutsch IPD / LADD DT04-2P Connector
Amps: 10 (on 12 volts) 5 amps (on 24 volts)
Lumens: 10,320
LED Light Color: 6000K
LED Life Expectancy: 50,000 hours
Optics Efficiency: 90%
Materials: Aluminum Housing, Polycarbonate Lens
Housing Colors: Black or White
Flood Beam: Lux @ 1 meter = 24,000 @ 3 meters = 3,850
Spot Beam: Lux @ 1 meter = 31,500 @ 3 meters = 6,550

3 year warranty replacement on this LED light. After 30 days, the customer ships the failed LED light and/or LED bulb to Larson Electronics at their expense. If the failure is a manufacturer defect, we will ship a new replacement to the customer. If failure occurs within 30 days of receipt, Larson Electronics will provide a return label via email to the customer. When the failed light is returned, Larson Electronics will ship a new

Features

Fast Average Current Control
Programmable Off-Time Switching
Linear Dimming Input
PWM Dimming Input
Short Protection w/ Skip Mode
Ambient Op Temp -40°C to +125°C
Pin-Compatible with the HV9910B
Magnetic Mounting Bracket w/ (3) 200lb Magnets
View Avg-Mode Driver Control PDF
CE Certified

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

replacement.

Buy American Compliant

The LEDP10W-120ET-M from Larson Electronics is a LED Light Bar that is ideal for a wide variety of uses including equipment, vehicle, military, law enforcement and industrial manufacturing applications. The 10,320 lumens of light output with low voltage and amp draw, 50,000 hour service life and 9 to 46 volt compatibility provides operators with a versatile and powerful LED lighting solution. The LEDP10W-120ET-M also features three 200 lb. grip magnets to be easily and securely mounted to flat, ferrous metal surfaces

The LEDP10W-120ET-M LED light bar from Larson Electronics produces 10,320 lumens of bright light while drawing only 120 watts @10 amps from a 12 volt electrical system. Twelve Cree XLamp MC-E® ten watt LEDs producing 860 lumens each are paired with high purity optics to produce a 20 degree spread spot beam approximately 1150` long by 220` in width. We also offer floodlight versions with a 40 degree beam spread to provide more light over a larger area nearer the fixture, making flood versions ideal for use as work lights. These LED light bars are waterproof to 3 meters, sealed against intrusion by dust and dirt and very ruggedly constructed to withstand the most demanding environments, conditions and applications.

An integral Pulse Width Modulation controller, small profile, low power requirements, high durability and versatile mounting system makes these LED light emitters a superior lighting solution for a wide array of applications including but not limited to: military, industrial manufacturing, machine visioning, security and law enforcement, boating, vehicles and commercial structure illumination.



This photo shows an open field illuminated only by ambient light at approximately 9:00 pm.

Click Photo to Enlarge

This is the `Larson Electronics` sign approx. 700` away. Typically, flood lights do no reach long distances, however, the LEDP10W-120ET-M reaches the 700 foot mark easily.

Click Photo to Enlarge

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 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 100% 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.

PWM Control: The pulse width modulation drivers in this unit also provide secondary benefits through the ability to tap into a provided input wire with an external pulse generator and adjust the duty cycle of the current being applied to the LEDs. Thus you can connect an external dimmer, switch or pulse control and adjust the perceived output of the light, effectively causing the light to flash, dim or brighten to the desired levels. Additionally, this method of controlling light output results in a corresponding drop in amperage draw, so if the duty cycle is cut back to 50% there will be a matching 50% reduction in amperage draw. These units are also able to monitor and adjust input current to maintain the correct LED voltage levels regardless of input levels across a specific range. These LEDP10W series light bars can operate on current ranging from 9 to 46VDC without any modifications necessary as a result. This ability to sense and adjust input current also provides protection against voltage spikes and drops that can occur in vehicle electrical systems which would otherwise result in burning up or premature LED failure without it.

Durability: As well as unparalleled heat control, the LEDP10W series of LED light bars 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 85 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 MC-E® LEDs offer resistance to shocks and vibrations and are rated at 70% lumen maintenance after 50,000 hours of use.

Mounting: The LEDP10W-120ET-M features a magnetic mounting bracket that consists of three 200 lb. grip magnets arranged in a row along the rear of the light bar. This allows operators to very quickly and easily attach the light bar to flat surfaces made of ferrous metals such as the roof of a vehicle or the side of a tool box. The 600 pounds of total gripping strength ensure a strong hold that won`t put the light bar at the risk of falling or becoming detached from the mounting surface.

Note: Most Larson Electronics LEDLB, LEDP3W, LEDP10W, and LED10W series LED spotlights and floodlights are terminated with a Deutsch IPD / LADD DT04-2P connector. The mating connector plug is DT06-2S. Most LEDLB and LED10W series lights ship with mating connector as part of a harness or pigtail, depending on the model. Some larger LED lights like the LEDLB-160X2 or LEDLB-200X2 or multiple function LED lights (i.e. high/low beam, modulating, IR/Visible combos) will have different Deutsch connectors.

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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LEDP10W-120ET-M 40° Flood Beam



LEDP10W-120ET-M 20° Wide Spot Beam



CONDITIONS

Vin min (V) = 9	**toff (us) = 2.9**
Vin nom (V) = 12	**R1 (kohm) = 50.2**
Vin max (V) = 50	**L1 (uH) = 3.0**
Vo min (V) = 6.5	**L-Pk (A) = 2.9**
Vo nom (V) = 6.8	**L-rms (A) = 2.9**
Vo max (V) = 7	**Ipk (A) = 2.5**
I-LED (A) = 2.2	**R2 (ohm) = 0.10**
Efficiency = .85	**I-FET (A) = 2.2**
fsw nom (kHz) = 150	**fs min (kHz) = 77**
Ts nom (us) = 6.666667	**fs max (kHz) = 301**
Base frequency-	= 36~37Khz @ 12V
Amplitude of pulse width-	= 27Ms
Outside: External dimmer-	= 500Hz
Inside : Current sensing from-	77KHz at 12V to 300KHz at 50V

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Frequently Asked Questions (FAQ)

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LEDP10W-120ET-M

Product ID: 148204

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:

LEDP10W-120ET-M-Beam Config-Housing Color

Example: LEDP10W-120ET-M-SP-BLK

Beam Config	
SPOT	-SP
FLOOD	-FL

Housing Color	
BLACK	-BLK
WHITE	-WHT

Links (Click on the below items to view):

- **CE Certificate**
- **MSDS (Material Safety Data Sheet**
- **RoHS Certificate (Restriction of Hazardous Substances)**
- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**