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LED7W-20

140 Watt High Intensity LED Light - 20 LEDs - 11270 Lumens - Trunnion Bracket - IP69K

Product ID: 144838

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.

LED7W-20 High Output LED Light

Lamp Type: CREE LED
Dimensions: 9.37"-W x 6.59"-H x 4.13"-D
Watts: 140
Voltage: 9-32V
Raw Lumens: 16000
Effective Lumens: 11270
Effective Luminous Efficacy: 80.5 Lm/W
Wiring: Deutsch DT04-2P Connector
Amps: 5.83 Amps @ 24V
Color Temp: 6000K
LED Light Color: White
LED Life Expectancy: 50,000 hours
Lighting Configuration: 25° Spot, 40° Narrow Flood or 60° Flood
IP Rating: IP69K
Vibration Resistance: 21 Grms
Materials: Aluminum Housing, Polycarbonate Lens
Housing Colors: Black
Housing Coating: Marine Grade Anti-Corrosive
Bracket Type: Trunnion & Single Bolt
Weight: 9.26 Lbs

LED7W-20 Features

Automatic Current Sensing and Adjusting
Active Heat Management
Ambient Op Temp -40°C to +80°C
IP69K High Temp High Pressure Wash Down
CE Certified
Marine Grade Anti-Corrosive Coating
CISPR25 Klass 1/CE Approved

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671
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E-mail: sales@larsonelectronics.com

Buy American Compliant

The LED7W-20 from Larson Electronics is an LED Light that offers high output from a compact form factor and is ideal for use in mining applications as well as heavy equipment, hunting, boating, vehicle, military, law enforcement and industrial manufacturing uses. A 11,270 effective lumen output, 5.83 amp draw, 50,000 hour service life and 9-32 volt compatibility provides operators with a rugged and powerful LED alternative to 250 watt metal halide lamps that uses little power and can withstand rugged use and abusive mining conditions.

The LED7W-20 high output LED light from Larson Electronics produces 16,000 raw lumens and 11,270 effective lumens of high intensity light while drawing only 140 watts @ 5.83 amps from a 24 volt electrical system. Twenty CREE seven watt LEDs producing 564 lumens each are arranged in rows and paired with high purity optics to produce a 60° wide flood beam that is ideal for covering a substantial amount of area ideal for use as dedicated work and area lights. The LED7W-20 is also available in a 25° spot beam configuration and a 40° narrow flood beam configuration 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.

LED7W-20 lights are ideal replacements for fragile and hot running 250 watt metal halide lamps. They offer soft start technology, a small profile, low power requirements, high durability and a shock dampening mounting system that makes these LED light emitters a superior lighting solution for rough applications where power and reliability is critical. The heavy duty design and high power of these LED lights also makes them suitable for a wide array of applications including but not limited to: military, industrial manufacturing, machine visioning, mining, security and law enforcement, boating,vehicles and commercial structure illumination.

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.

Protection: These high output LED light bars feature soft start technology, allowing the LEDs to gradually increase to maximum intensity instead. Low in rush current at start-up reduces wear on associated components, increasing overall life of the internal electronics and improves downtime. Built in redundancy lessens chance of full fixture failure, while the reverse polarity operation protects the fixture from shorting the internal components.

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.

Voltage: The drivers in this unit provide the ability to automatically monitor and adjust input current to maintain the correct LED voltage levels regardless of input levels across a specific range. These LED7W-20 LED light bars can operate on current ranging from 9-32V DC 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, these LED lights from Larson Electronics also offer IP69K rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40°C to +80°C, are waterproof to three meters, can withstand high pressure and high temperature wash downs, and resist ingress of dust, dirt and humidity. The housings are formed from extruded aluminum and the lenses are unbreakable polycarbonate. The CREE LEDs help these units achieve up to 20Grms rated resistance to vibrations and are rated at 70% lumen maintenance after 50,0000 hours of use. We recommend these LED lights for use in applications that require regular intensive cleaning and are exposed to a lot of vibration, dust, dirt, and abusive working conditions are encountered.

Mounting: Each unit is equipped with an innovative trunnion style mounting bracket that allows the light to be attached to flat surfaces and adjusted through 360 degrees of vertical movement. To vertically adjust the unit after mounting, the user simply loosens the screws located on either side of the unit, moves it into the desired position, then retightens the screws.

Note: The LED7W-20 series feature gold plated DT connectors to provide better conductivity. Most Larson Electronics LEDP5W-30, 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.

Applications for the LED7W-20 include but are not limited to mining, dump trucks, construction machinery, cement mixers, and car washes.

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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LED7W-20

Product ID: 144838

Warranty: 36 Months

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

Options:

LED7W-20-Beam Config

Example: LED7W-20-SP

Beam Config	
10° SPOT	-SP
40° NARROW FLOOD	-NF
60° FLOOD	-FL

Links (Click on the below items to view):

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