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BCML-LED-10R

10W High Intensity Bar Clamp Mounted LED Spotlight - (1) 10W LED - 10" Shaft - 860 Lumens

Product ID: 70805

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.

BCML-LED-10R Bar Clamp Mount LED Spotlight

LEDs:(1) Cree XLamp MC-E 10W LED
Dimensions: Light Head: 2"OD x 2"H x 2.5"D - Total Length: 11 3/8"
Watts: 10W
Voltage: 9-46V DC
Spot Beam: 280`L x 70`W
Weight: 2 lbs
Lighting Configuration: 20° Spot or 40° Flood
Mounting: Bar Clamp
Bar Size Options: 0.75", 1", 1.25", 1.5", 1.75", 2", 2.25", 2.5" or 2.75"
Wiring: Deutsch IPD / LADD DT04-2P connector
Amps: 0.25A @ 12V DC
Lumens: 860
LED Light Color: 6000K
LED Life Expectancy: 50,000 hours
Optics Efficiency: 90%
Materials: Aluminum Housing, Polycarbonate Lens
Housing Colors: Black or White

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 replacement.

BCML-LED Features

IP68 Rated Waterproof to 3 Meters
LEDs Driven At 90%
-40°C to +80°C Operating Temp Range
70% Lumen Retention @ 50,000 Hours

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

The BCML-LED-10R from Larson Electronics is a Bar Clamp Mount LED Spotlight that offers high light output in a durable, low profile housing. This light produces a very tight spot pattern, can run on any voltage from 9 to 46 volts and provides a rugged lighting solution ideal for use in marine environments, industrial and commercial applications, machine vision system lighting, heavy equipment illumination, vehicle lighting and law enforcement.

The BCML-LED-10R LED bar clamp mount spotlight from Larson Electronics produces a 280` long by 60` wide light beam with 860 lumens of bright light while drawing only 10 watts @ 1/4 amp from a 12 volt electrical system. A single Cree XLamp MC-E 10 Watt LED producing 860 lumens is combined with high purity optics to produce a 20 degree spread spot beam. This fixture is ideal for anyone who is looking for a tight spot light that offers outstanding life hours of 50,000+.

These LED bar clamp mount spotlights are IP68 rated and waterproof to three meters, sealed against intrusion by dust and dirt and ruggedly constructed to withstand demanding environments and applications. It is constructed of extruded aluminum and feature rubber isolated mounts and unbreakable polycarbonate lenses to provide durability and resistance to vibrations, impacts, waves, hard rains, sand and high winds.

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 46V 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: The BCML-LED-10R offers IP68 rated construction that is designed to withstand tough environmental and operating conditions. These units can operate in temperatures ranging from -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 BCML-LED-10R is mounted on the end of a 10" shaft. An aluminum bar clamp is also mounted to the shaft to simplify mounting. These bar clamps are not adjustable. The top portion of the mount has a through hole that enables the operator to pass one of two 1/4-20 bolts through it and secure that stud with a Nylock nut. The Nylock nut and bolt are provided with the bar clamp. Small machine screws secure the bottom half of the clamp to the top portion. The installer simply affixes the light to the top portion and places the assembly on the rail or bar. The bottom portion is positioned and secure with the machine screws, cinching the clamp tightly to the bar.
Bar Sizes: The BCML-LED-10R Bar Clamp LED Spotlight is available with various sized bar clamp mounts to accommodate different sized rails or bars. For example, if the rail you need to mount this spotlight on has an outside diameter of 1", you would choose the 1" size mount. The bar sizes that this mounting system can accommodate are as follows: 0.75", 1", 1.25", 1.5", 1.75", 2", 2.25", 2.5" or 2.75". Make your selection below when ordering.
Operation: Operator controls rotation and elevation of spotlight outside of vehicle by twisting and turning a handle. The beam remains where the operator places it until the handle is moved.
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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BCML-LED-10R

Product ID: 70805

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

BCML-LED-10R-Finish-Beam Angle-Bar Size

Example: BCML-LED-10R-Black-20DB-.75

Finish	
BLACK	-Black
WHITE	-White

Beam Angle	
20° SPOT	-20DB
40° FLOOD	-40DB

Bar Size	
0.75	-.75
1”	-1
1.25”	1.25
1.5”	-1.5
1.75”	-1.75
2”	-2.00
2.25”	-2.25
2.5”	-2.50
2.75”	-2.75

Links (Click on the below items to view):

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