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LED10WSA-40

40 Watt High Intensity LED Light - 4 LEDs - 3,680 Lumens - Degreed Aiming - Soft Start LEDs

Product ID: 71277

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.

LED10WSA-40 High Output LED Light

Lamp Type: CREE XL-L2® LED
Dimensions: 5.02"-L 5.20"-H 3.98"-D
Watts: 40
Led Drive %: 90%
Voltage: Universal Voltage 11-65V DC
Beam Spread: 10° Spot, 40° Flood, 60° Flood, 30°/60° Elliptical
Mounting: Flat Surface 304 SS Bracket - 360 Degree Adjustable
Wiring: Gold Plated Deutsch IPD / LADD DT04-2P connector
Amps: 3.34 (on 12 volts) - 1.67 (on 24 volts)
Lumens: 3,680
LED Light Color: White
LED Life Expectancy: 50,000 hours
Optics Efficiency: 90%
Materials: Aluminum Housing, Polycarbonate Lens
Housing Colors: Black
Weight: 4.85 Lbs

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.

LED10WSA-40 Series Features

Automatic Current Sensing and Adjusting
Active Heat Management
Ambient Op Temp -40°C to +80°C
IP69K High Temp High Pressure Wash Down
EMC/EMI CISPR 25 Class 3 Rated
304 Stainless Steel Mounting Hardware
Shock Dampening Mounting System

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

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Buy American Compliant

The LED10WSA-40 LED Light 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 3,680 lumen output, 50,000 hour service life and 12-24 volt compatibility provides operators with a rugged and powerful LED alternative to 300 watt halogen lamps that uses little power and can withstand rugged use and abusive mining conditions.

The LED10WSA-40 high output LED light from Larson Electronics produces 3,680 lumens of high intensity light while drawing only 40 watts @3.34 amps from a 12 volt electrical system. Four CREE XM-L2® ten watt LEDs producing 920 lumens each are arranged in rows and paired with high purity optics to produce a well focused 10° spot beam that is ideal for providing far reaching concentrated illumination while still covering a substantial amount of area. We also offer optional floodlight versions with a 40° or 60° beam spread to provide more light over a larger area nearer the fixture, making flood versions ideal for use as dedicated work and area 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. LED10WSA-40 lights are ideal replacements for fragile and hot running 300 watt halogen 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.

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 LED10WSA series light bars can operate on voltage ranging from 11 to 65 VDC 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 LED10WSA series of 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 XM-L2® LEDs help these units achieve up to 60Grms 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. The LED light head is secured to the mounting bracket with shock dampening rotating inserts. The insert provides precision aiming down to 1° while providing increased longevity to the LED fixture. 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. The base of the mounting trunnion is equipped with several machined slots which allow users to utilize existing mounting holes and slide the unit for precise mount positioning. The stainless steel trunnion bracket has preset angles marked in 5° intervals, allowing operators to precisely aim each fixture.

Note: The LED10WSA 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 LEDP10WSA include but are not limited to mining, dump trucks, construction machinery, cement mixers, and car washes.

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Frequently Asked Questions (FAQ)









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LED10WSA-40

Product ID: 71277

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

Options:

LED10WSA-40-Beam Config

Example: LED10WSA-40-SP

Beam Config	
10° SPOT	-SP
40° FLOOD	-FL
60° FLOOD	-WF
SPOT & FLOOD	-SpFl

Links (Click on the below items to view):

- **CE Certificate**
- **MSDS (Material Safety Data Sheet**
- **RoHS Certificate (Restriction of Hazardous Substances)**
- **HigResPic1**
- **HigResPic2**
- **HigResPic3**
- **HigResPic4**
- **HigResPic5**
- **HigResPic6**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**