Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
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www.LarsonElectronics.com
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Fax: 903.765.7664

Product ID: 146945

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image:

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.

EXHL-TRN-LE3-IR-1224 Explosion Proof Infrared LED Light Fixture

Lamp Type: Infrared LED (Edison Edixeon®)
Dimensions: 8"L x 6"W x 14"H
Watts: 12W
Voltage:12-24V DC
Lumens: 720
LED Light Color: Infrared
Infrared Wavelength: 750 nm, 850 nm or 940 nm
LED Life Expectancy: 50,000 hours
Lighting Configuration: 10° Spot or 35° Flood
Spot Beam: 120`L x 60`W
Flood Beam: 80`L x 80`W
Ambient Operating Temp Range: -40°C to +60°C
Housing Material: Aluminum
Light Housing Color: Powder Coated - Grey
Lens Material: Hardened Borosilicate Glass
Mounting: Adjustable Surface Mount Bracket w/ Set Screws
Wiring Hub: (2) 3/4" NPT

Ratings/Approvals

Listed for United States & Canada
Class I, Divisions 1 & 2, Groups B, C, D
Class I, Zones 1 & 2, Groups IIB+H2, IIA
Class II, Divisions 1 & 2, Groups E, F, G
Class III, Divisions 1 & 2
NEMA 3R, 4, 7 (B, C, D), 9 (E, F, G)
NRTL Listed to UL 508A
NRTL Listed to UL 1203
NRTL Listed to CSA C22.2 No 14, 25, 30

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

Made in Texas

The EXHL-TRN-LE3-IR-1224 from Larson Electronics is an Explosion Proof Portable

Surface Mount Infrared LED Fixture that operates on 12-24V DC, which is designed for vision systems, sensors, cameras, security systems and more. The EXHL-TRN-LE3-IR-1224 is Class I, Divisions 1 & 2, Groups B, C, D, Class I, Zones 1 & 2, Groups IIB+H2, IIA, Class II, Divisions 1 & 2, Groups E, F ,G and Class III Divisions 1 & 2 rated for hazardous areas and is listed for use worldwide including the United States, Canada, Europe and Asia. This 12-watt explosion proof infrared LED light fixture is offered in a choice of spot or flood beam configuration and 750 nm, 850 nm or 940 nm infrared wavelengths.

The EXHL-TRN-LE3-IR-1224 produces intense infrared light for illumination within hazardous areas and potentially explosive work environments. This 12-watt explosion proof infrared LED light fixture operates on 12-24V DC. The EXHL-TRN-LE3-IR-1224 is available in two lighting configurations: spot and flood. Four Edison Edixeon® three watt LEDs producing 180 lumens each are arranged in rows and paired with high purity 10 degree optics to produce a tightly focused spot beam with limited spread or light spillage. The spot configuration features a 10° beam that measures 120`L x 60`W. The flood configuration throws a 35° beam that measures 80`L x 80`W. An adjustable surface mount mechanism allows operators to control the direction of the beam by tilting the unit towards the desired target.

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.

Durability: The EXHL-TRN-LE3-IR-1224 explosion proof infrared LED light fixture from

Larson Electronics is rated NEMA Type 3, 4, 4X, 7 (B,C,D) and 9 (E,F,G) and designed to withstand the rigors of demanding environmental and operating conditions while remaining lightweight and easy to use. These units can operate in temperatures of -40° Celsius to 60° Celsius, are waterproof to 3 meter and resist ingress of dust, dirt and humidity. The housings are formed from extruded aluminum and the lenses are hardened borosilicate glass. The infrared LEDs offer inherent LED resistance to shocks and vibrations.

Mounting: This explosion proof infrared LED light fixture features an adjustable surface mount bracket for seamless control. The included adjustable flat surface bracket has two set screws on the bracket, allowing operators to loosen the mounting bracket, adjust the light`s tilt orientation, and retighten to hold the luminary in position. A single thru-hole mounting bolt allows operators to adjust the rotation of the fixture by loosening one bolt.

Wiring: Terminal strips inside the fixture allow operators to make electrical connections. Wiring is fed through rigid pipe to the 3/4" NPT hubs on either side of the fixture and tied in to the fixture’s terminal strips, completing the electrical connection.

High Quality Features	Superior LED Benefits
	1. 50,000+ hour lifespan.
	2. Can SAVE 50% or more on energy.
	3. Qualifies retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
1. Low power consumption.	4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
2. Instant on/off operation.	5. 100% recyclable.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy.	6. No toxins-lead, mercury.
4. Superior build for withstanding rough treatment.	7. No UV light, infrared radiation or CO2 emissions.
5. Lifespan of 50,000+ hours.	8. Qualifies buildings for LED and other sustainable business certifications.
6. Powder coated aluminum fixture body.	9. Bright, even light maintains consistent color over time.
7. Adjustable surface mount bracket w/ set screws.	10. Instant on/off - No flickering, delays or buzzing.
8. Low profile - Light weight	11. Very good color rendering.
9. Compact design - 12 watts	12. Vibration/impact resistant.
	13. Significantly cooler operation.
	14. Less frequent outages, higher output improves workplace safety.

Applications: Security systems, cameras, sensors, vision systems, covert operations, analytical chemistry and more.

Note: *Need to customize the color and wavelength of this light? We can create custom versions of this explosion proof infrared LED light. Just let us know your preferred color and wavelength during the ordering process.*

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)

There are no Faqs

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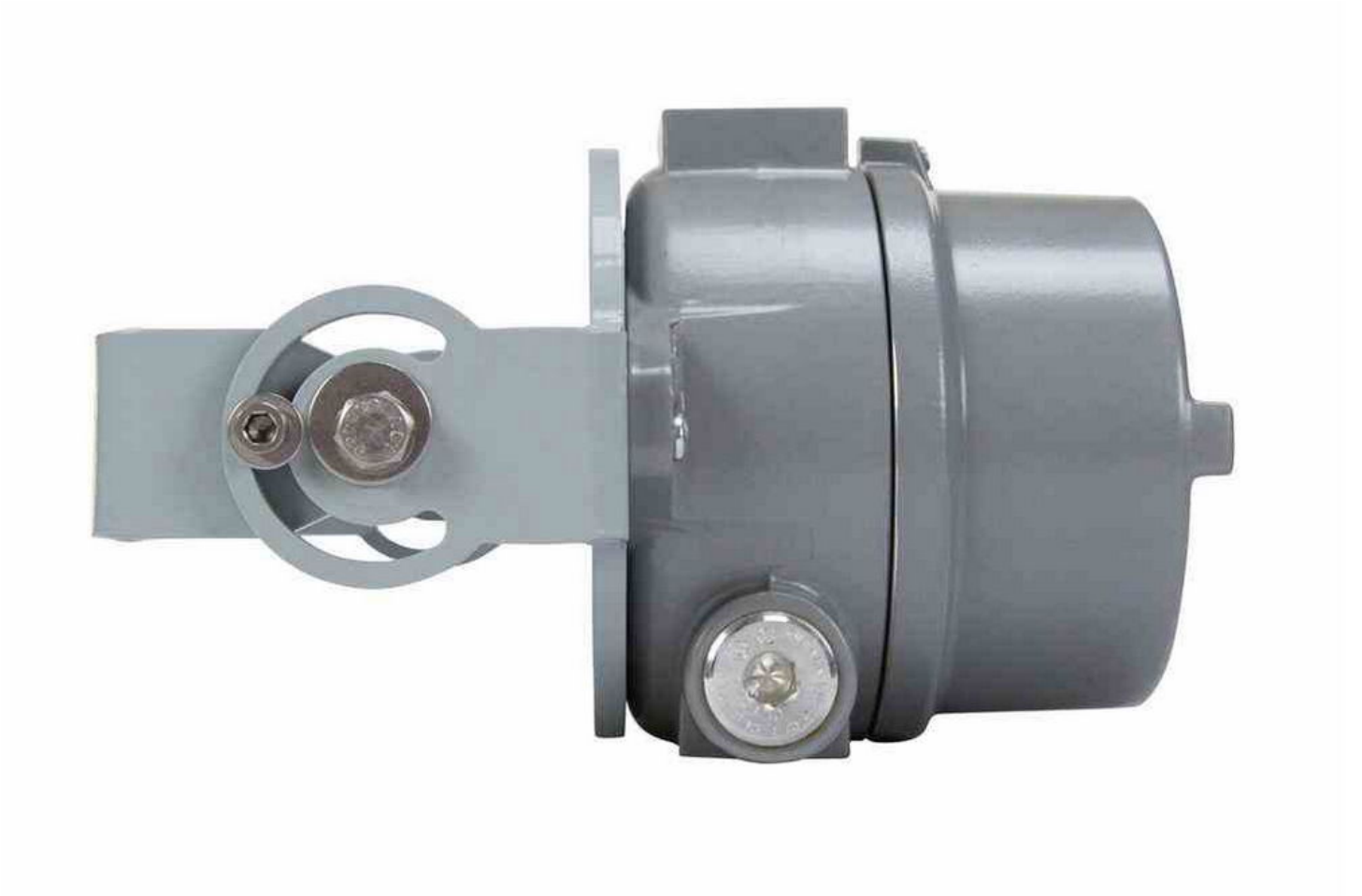

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Product ID: 146945

Export Control Classification Number (ECCN): EAR99

Options:

-Beam Config-Wavelength
Example: -FL-750NM

Beam Config	
FLOOD	-FL
SPOT	-SP

Wavelength	
750NM	-750NM
850NM	-850NM
940NM	-940NM

Links (Click on the below items to view):

- **ATEX Certificate (European Explosion Proof)**(https://www.larsonelectronics.com//images/product/ATEXCert/146945.PDF)
- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(https://www.larsonelectronics.com//images/product/CECCert/146945.PDF)
- **CE Certificate**(https://www.larsonelectronics.com//images/product/CECert/146945.PDF)
- **Certificate 1, Misc**(https://www.larsonelectronics.com//images/product/Cert1/146945.PDF)
- **Certificate 2, Misc**(https://www.larsonelectronics.com//images/product/Cert2/146945.PDF)
- **Certificate 3, Misc**(https://www.larsonelectronics.com//images/product/Cert3/146945.PDF)
- **Certificate 4, Misc**(https://www.larsonelectronics.com//images/product/Cert4/146945.PDF)
- **Dimensional Drawing 2D**(https://www.larsonelectronics.com//images/product/DimensionalDrawing/146945.PDF)
- **IEC Ex Certificate (International Explosion Proof)**(https://www.larsonelectronics.com//images/product/IECExCert/146945.PDF)
- **MSDS (Material Safety Data Sheet**(https://www.larsonelectronics.com//images/product/Msds/146945.PDF)
- **Operations Manual**(https://www.larsonelectronics.com//images/product/Manual/146945.PDF)
- **RoHS Certificate (Restriction of Hazardous Substances)**(https://www.larsonelectronics.com//images/product/RoHSCert/146945.PDF)
- **SpecSheetFarsi**(https://www.larsonelectronics.com//images/product/SpecSheetFarsi/146945.PDF)
- **SpecSheetFrench**(https://www.larsonelectronics.com//images/product/SpecSheetFrench/146945.PDF)
- **SpecSheetRussian**(https://www.larsonelectronics.com//images/product/SpecSheetRussian/146945.PDF)
- **SpecSheetSpanish**(https://www.larsonelectronics.com//images/product/SpecSheetSpanish/146945.PDF)
- **STEP File (3D CAD Model)**(https://www.larsonelectronics.com//images/product/Step/146945.ZIP)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(https://www.larsonelectronics.com//images/product/NECCert/146945.PDF)
- **HigResPic1**(https://www.larsonelectronics.com//images/product/HigResPic1/146945.JPG)
- **HigResPic2**(https://www.larsonelectronics.com//images/product/HigResPic2/146945.JPG)
- **HigResPic3**(https://www.larsonelectronics.com//images/product/HigResPic3/146945.JPG)
- **HigResPic4**(https://www.larsonelectronics.com//images/product/HigResPic4/146945.JPG)
- **HigResPic5**(https://www.larsonelectronics.com//images/product/HigResPic5/146945.JPG)
- **HigResPic6**(https://www.larsonelectronics.com//images/product/HigResPic6/146945.JPG)
- **HigResPic7**(https://www.larsonelectronics.com//images/product/HigResPic7/146945.JPG)
- **HigResPic8**(https://www.larsonelectronics.com//images/product/HigResPic8/146945.JPG)
- **Video1**(https://www.youtube.com/watch?v=gZy0lfb3BgM)
- **Video2**(https://www.youtube.com/watch?v=OGbw09xDTqI)
- **Video3**(https://www.youtube.com/watch?v=ZEWSEBXdzYE)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)