

Explosion Proof 70 Watt LED Light - Class I & II, Division I & II - Permanent Mount FixturePart #: [EPL-TN-70LED](#)**Made in the USA**

The Larson Electronics EPL-TN-70LED Low Voltage Portable Explosion Proof LED Light is U.L. approved Class 1 & 2, Division 1 & 2, and is rated for use in wet and marine environments. The LED lamp used with this unit provides operators with excellent power and efficiency coupled with high versatility and ease of use.

The EPL-TN-70LED explosion proof LED light provides 6,020 lumens of light output in a portable and rugged explosion proof lighting package. The 70 watt LED lamp assembly in this unit produces higher quality illumination with better color rendering and contrasting than typical 400 watt halogen lamps while drawing only 70 watts at 5.84 amps. The LED lamp runs cooler than 400 watt halogen lamps, resulting in an easier and safer to handle unit and less heat in the workspace. The LED lamp in this unit produces a brilliant 40 degree flood pattern of light that is ideal for high vibration environments and general illumination in any confined space area (silo, tank or manhole).

The EPL-TN-70LED operates on a range of voltages from 9-48 volts DC or 120-277V AC to provide a lighting solution for areas where explosion proof fixtures are required. This unit's durability, easy mounting, high power and the good color rendering of its LED lamp make it ideal for close work and hazardous areas where safety, detail and accuracy are critical.



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This lamp can be easily adjusted up or down and locked into position via a side mounted adjustment knob. The lamp housing is waterproof and constructed of thick copper free aluminum alloy, making it ideal for use in wet and marine environments. The EPL-TN-70LED lamp assembly includes a 70 watt metal LED lamp in a copper-free cast aluminum housing with a thermoset powder coat finish. The shell, covers and sealed fittings are also made of copper-free aluminum. The lens is constructed of thermal shock and impact resistant tempered glass and the housing contains threaded joints lubricated with non-drying lubricant. The LED lamp in this unit has no filament and is thus highly resistant to damage from shocks or impacts, greatly reducing the chances of damage should the be dropped or hit, unlike incandescent lamps which may break or shatter.

Durability: This unit incorporates a 70 watt LED lamp assembly containing seven CREE XLamp MC-E® ten watt LEDs producing 860 lumens each, and a copper-free cast aluminum housing with a thermoset powder coat finish. The shell, covers and sealed fittings are also made of copper-free aluminum. The lens is constructed of 3/4" thermal shock and impact resistant tempered glass and the housing contains threaded joints lubricated with non-drying lubricant. The LED lamp assembly has no filament and is thus highly resistant to damage from shocks or impacts, greatly reducing the chances of damage should the lamp be dropped or hit, unlike incandescent lamps which may break or shatter. The lamp is rated at 50,000+ hours of life, providing longer service life than typical halogen lamps.

Energy Consumption Comparison

Wattage	70 watts
Amp Draw @ 120V AC	0.59 amps
Amp Draw @ 277V AC	0.26 amps
Amp Draw @ 12V DC	5.84 amps
Amp Draw @ 24V DC	2.92 amps
Lamp Life Expectancy	50,000 hours
Color Temperature	6000K
Operation cost per year (8hs/day @ 11c/kWh)	\$22.49

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.

Suggested Applications: include but are not limited to wastewater treatment plants, refinery tanks, oil and gasoline loading docks, coal pulverizing facilities, munitions storage areas, tunnel projects, utility gas plants, power plant areas, hazardous areas and mining conveyor belts.

Made in the USA Quality

1. High Efficiency and Output 70 Watt LED lamp.
2. 70 Watt LED Lamp Provides Cooler Operation..
3. Rugged Die Cast Aluminum Lamp Housing.
4. 3/4" Shock Resistant Tempered Glass Lens.
5. Copper Free Shell, Covers and Sealed Fittings.
6. Vibration/Impact Resistant Construction.
7. Low Maintenance.
8. Permanent Adjustable Yolk Type Moounting.
9. 50,000+ Hour Lamp Life.
10. UL Approved for Marine Environments.

LED Benefits

1. Long lamp life.
2. High efficiency and low amp draw after initial startup.
3. High durability and reliability.
4. High output and very good color rendering.
5. Vibration and shock resistant.
6. Low maintenance.

Specifications / Additional Information

EPL-TN-70LED Explosion Proof LED Light

UL Listing: United States - Canada

Dimensions: W-13 1/4" D-12 1/2" H-11 1/2"

Weight: 21 Lbs

Total Watts: 70 watts

Voltage: 120-277 Volts AC, 9-48 Volts DC

Lamp Lumens: 6020

Lamp Life Expectancy: 50000+ Hours

Lamp Type: LED

LED Color: 6000K

Operating Temp Range: T4 rated

Mounting: Permanent Mount Yolk

Wiring: 3 Foot Pigtail

U.L Approval: [U.S Certificate](#) Canada Certificate

U.L. Ratings

Class I & II, Division 1 & 2, Groups C,D

Class II Division 1 & 2, Groups F, G

Class III

UL 781 portable HAZLOC use

UL Certified- U.S - CSL

Special Orders- Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-498-3363

E-mail: sales@larsonelectronics.com

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[Part #: EPL-TN-70LED \(69977\)](#)

Options:

EPL-TN-70LED- BEAM - VOLTAGE

Example: EPL-TN-70LED-SP-1227

BEAM		VOLTAGE	
Spot	-SP	120-277V AC	-1227
Flood	-FL	9-48V DC	-1224









Links (Click on the below items to view):

- [Dimensional Drawing](#)
- [STEP](#)
- [DXF](#)