

## **HALP-EMG-24-2L-ITG-LED**

**40W Hazardous Location Light Emergency Backup Fixture, Non-Metallic, 1 Integrated LED Array, Corrosion Resistant, Marine Application, C1D2/C2D2**

**Product ID: 224518**

**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.**

### **HALP-EMG-24-2L-ITG-LED - Hazardous Area LED Offshore Emergency Light**

**Listing: NRTL Listed to United States, Canada**

**Lamp Technology: Integrated LED**

**Dimensions: 25.88"-L x 8.25"-W x 7.00"-H**

**Weight: 13 lb**

**Voltage: Universal 90 to 305V AC or 127 to 431V DC**

**LED Array Qty: (1)**

**LED Array Wattage: 40 Wats**

**Total Watts: 40 Watts**

**LED Array Lumens: 4,000 lms**

**Total Lumens: 4,000 lms**

**Luminous Efficacy: 100 Lm/w**

**Lamp Life Expectancy: 60,000+ Hours**

**Lamp Color Temperature: 6000K**

**Color Rendering Index: -**

**Lamp Type: Integrated LED**

**Lamp Base: -**

**Replacement Lamp: -**

**Beam Angle: 160°**

**Dimming Function: No**

**Lighting Configuration: Flood**

**Power Efficiency: -**

**Power Factor: -**

**Amps: 0.34A @ 120V, 0.18A @ 220V, 0.17A @ 240V, 0.14A @ 277V**

**Battery AC Input Voltage: 120/277V AC 60 Hz**

**Battery AC Input Current: 90 mA**

### **Ratings/Approvals**

**Listed for United States and Canada**

**Class I, Division 2, Groups A, B, C, D**

**Class II, Division 2, Groups F, G**

**NRTL Certified to UL 844**

**NRTL Certified to UL 924**

**NRTL Certified to UL 1598A Marine Type (Salt water)**

**NRTL Certified to C22.2 No. 137**

**NRTL Certified to C22.2 No. 250.0**

**Meets USCG Specifications**

**California Title 24 Compliant**

**T4 Temperature Rating**

**Non-Corrosive Construction**

**Non-Metallic Housing Pan & Lens**

**Made in the USA**

**BAA Compliant**

**Silicone Free**

**CE Certified**

**Field Serviceable**

Battery AC Input Power Rating: 9.5W  
Battery Output Current: 120V @ 165mA - 277V @ 72mA  
Illumination Time: 90+ Minutes  
Lumens on Battery Power: 2,000 lms  
Battery Type: High Temp, Maintenance Free, Nickel Cadmium  
Battery Lifespan: 7 to 10 Years  
Battery Charge Current: 250 mA  
Battery Recharge Time: 24 Hours  
Ambient Operating Temp Range: 0°C to +50°C  
Operating Temp Rating: T6  
Minimum Operating Temp: 0°C  
Maximum Case Temp: +50°C  
Housing Material: Fiberglass Reinforced Polyester Housing  
Lens Material: Shatter/Impact Resistant Acrylic Diffuser  
Gasket Material: Neoprene  
Mounting: Flange Type Surface Mount or Pendant Mount  
Wiring Hub: 1/2" or 3/4" NPT

**Special Orders - Special Requirements**

Contact us for special requirements

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**Made in the USA**

**The HALP-EMG-24-2L-ITG-LED from Larson Electronics is a Hazardous Area Integrated LED Emergency Light Fixture that is U.S./Canada approved Class I Division 2 Groups A, B, C and D and is specifically designed to handle the rigors of wet and corrosive marine environments. This hazardous location LED light has a T4 temperature rating and carries a United States Coast Guard approval, making it ideal for applications such as oil rigs, ships, offshore applications, petrochemical, manufacturing, chemical storage, and water treatment centers.**

This two foot long, two lamp integrated LED fixture is ideal for operators seeking a top quality hazardous location light that will reduce operating costs, improve lighting quality, and reduce downtime incurred from frequent servicing intervals. The HALP-EMG-24-2L-ITG-LED hazardous area integrated LED light fixture is designed for use in wet areas and saltwater-marine environments where corrosion resistance is critical to equipment longevity and safety. This Class I Division 2 rated fixture is constructed of non-corrosive materials including a polyester housing reinforced with glass fiber, a poured in gasket for reliable sealing, and an impact resistant acrylic diffuser. Corrosion resistant plastic latches secure the lamp cover to the housing and provide a firm lock against the poured in seal to prevent drips and water intrusion.

A remote mounted battery backup unit that adds emergency light functionality to the fixture. This emergency LED light will run at the standard UL suggested 90 minutes after power is lost at 2,000 lumens. The light recharges the battery once electrical power is restored. Standard configuration includes a single emergency battery backup that is automatically recharged and kept in a ready state.



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[Click Photo to Enlarge](#)



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The HALP-EMG-24-2L-ITG-LED fixture is equipped with a specially designed integrated LED array which produces 19,200 lumens of bright light in a 160° wide flood beam spread, resulting in 50% more foot candles of illumination at 8 feet as compared to standard T5HO lamps when measured with an Extech light meter. Our integrated series are visibly brighter than standard T5HO's and have consistently surprised many of our customers with their unexpectedly high light output levels.

The HALP-EMG-24-2L-ITG-LED is NRTL Listed to UL 844 for Class I Division 2, Groups A, B, C, D hazardous locations. This fixture is also NRTL Listed to UL 1598A for outdoor marine type luminaires, and meets US Coast Guard specifications. This light fixture offers the extreme durability, high efficiency, and long lamp life of high power LEDs in a proven hazardous location fixture design, making it a reliable and affordable lighting solution for open areas where flammable chemicals and vapors may occasionally be present.

We have eliminated the ballast box normally associated with fluorescent fixtures which reduces overall weight and creates a slimmer unit profile. There is no ballast in this unit and the integrated LED array has a 60,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. The solid state design of LED technology give this fixture superior resistance to damage from vibration, extremes in temperature, and a lamp life over twice that of standard fluorescent bulbs.

Unlike the glass tube design of traditional fluorescent lamps, these LED T-Style lamps have no filaments or fragile housings to break during operation. Instead of using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. The LED assembly is mounted to the "tube" constructed from extruded aluminum, with an acrylic diffuser protecting the LEDs. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than fluorescent lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional fluorescent lighting. The LED array in this fixture produces 80% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. The LED array produces 4,000 lumens at 100 lumens per watt. A HALP-48-3L-T5HO hazardous location fluorescent light, with a combined total of 162 watts, draws 1.35 amps at 120 volts AC and produces 15,000 lumens. This LED version of the same light, with a total of 40 watts, draws only 0.67 amps at 120 volts AC and produces 4,000 lumens. 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. The HALP-48-2L-ITG-LED-V2 is universal voltage, not multi-tap, and operates on any voltage ranging from 90 to 305V AC or 127 to 431V DC without any modifications necessary. We also offer other variations of this light if needed to fit your specific application, 347-480V AC, 12-24V DC, 48V DC, and 0-10V dimmable models upon request.

#### Energy Consumption Comparison

|                         | <u>T5HO</u>   | <u>T8</u>    | <u>Integrated LED</u> |
|-------------------------|---------------|--------------|-----------------------|
| Wattage                 | 54 watts      | 28 watts     | 40 watts              |
| Amp Draw @ 120V AC      | 0.45 amps     | 0.23 amps    | 0.34 amps             |
| Amp Draw @ 220V AC      | 0.24 amps     | 0.12 amps    | 0.18 amps             |
| Amp Draw @ 240V AC      | 0.22 amps     | 0.12 amps    | 0.17 amps             |
| Amp Draw @ 277V AC      | 0.19 amps     | 0.10 amps    | 0.14 amps             |
| Amp Draw @ 12V DC       | 4.5 amps      | 2.34 amps    | 3.34 amps             |
| Amp Draw @ 24V DC       | 2.25 amps     | 1.16 amps    | 1.67 amps             |
| Fixture Lumens          | 5,000         | 3,500        | 4,000                 |
| Lamp Life Expectancy    | 20,000 hours  | 24,000 hours | 60,000 hours          |
| Color Temperature       | 5000K / 4100K | 4100K        | 6000K                 |
| Operation cost per year | \$28.38       | \$14.71      | \$21.02               |

(12hs/day @ 12c/kWh)

**Please note:** The above energy tables are comparing 2ft 4-lamp fixtures to the HALP-EMG-24-2L-ITG-LED integrated LED fixture. The light output is comparable to a 2ft 4-lamp fixture, but the form factor is of a 2ft 2-lamp fixture. This fixture has the same output as our HALS-48-4L with four 54 watt T5HO lamps, but in the compact form factor of the HALP-EMG-24-2L-ITG-LED housing. Currently you cannot achieve comparable light output in the same form factor from fluorescent lighting.

**Mounting Options:** Unless otherwise specified, our standard, most popular configuration is the flange mount shown enlarged below. We also offer a pendant mount for those needing to suspend the fixture away from the ceiling surface (i.e. suspend from pipe or conduit). Additional mounting configurations can be customized to meet the requirements on the application. Please contact us for special mounting configurations.



Surface Mount (Standard)  
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**Standard Flange Brackets:** Flange type stainless steel mounts attached at each end of the fixture enables it to be simply secured to any surface. The mounts provide some shock absorbency protection while enabling the user to simply mount the fixture with the through-hole taps that protrude on each side of the fixture. The mounting holes are 38.25" on center apart along the top of this hazardous location light. The mounting holes are 7.2" on center across the top of the light.



Pendant Mount (Optional)  
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**Standard Suspension Mounting:** Pendant mount fixtures hang from the ceiling and are suspended by rigid pipe. Each fixture is equipped with either two 1/2" or 3/4" NPT hubs, one on each end of the fixture. Operators bring rigid pipe down to the threaded mounting hubs. Wiring is fed down through the rigid pipe to one of the NPT hubs and tied in to the fixture's lead wires, completing the electrical connection. The remaining pendant hub provides support for the opposite end of the fixture.

**Suggested Applications:** The HALP-EMG-24-2L-ITG-LED is designed for marine, wet, damp locations where corrosion resistant fluorescent lights are required or are already present. This includes petrochemical facilities, lubrication pits, oil drilling rigs, crew quarters, solvent/cleaning areas, water treatment areas,

processing plants, and marine loading docks.

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](mailto: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)

**HALP-EMG-24-2L-ITG-LED**

**Product ID: 224518**

**Warranty:** 60 Months

**Harmonized System (HS) Code:** 9405.41.84.10

**Export Control Classification Number (ECCN):** EAR99

**Options:**

**HALP-EMG-24-2L-ITG-LED-Mount-Hub Config-Color Temp**

**Example:** HALP-EMG-24-2L-ITG-LED-SFC-0.5IN-56K

| Mount   |      |
|---------|------|
| SURFACE | -SFC |
| PENDANT | -PND |

| Hub Config |         |
|------------|---------|
| 1/2IN      | -0.5IN  |
| 3/4IN      | -0.75IN |

| Color Temp |      |
|------------|------|
| 5600K      | -56K |
| 4500K      | -45K |
| 3000K      | -30K |

Links (Click on the below items to view):

- [USA NEC Certificate \(Commonly referred to as UL Certificate\)](#)
- [HigResPic1](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)