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HAL-EMG-48-2L-LED-D-V2

56W Hazardous Location Light Emergency Backup Fixture, Aluminum, 2 LED Lamps, Dimmable, Terminal Strip, Corrosion Resistant, Marine Application, C1D2/C2D2

Product ID: 144257

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.

HAL-EMG-48-2L-LED-D-V2 - Hazardous Area Dimmable LED Offshore Emergency Light

Listing: NRTL Listed to United States, Canada
Lamp Technology: LED
Surface Mount Dimensions: 53.74"-L x 7.03"-W x 9.11"-H
Pendant Mount Dimensions: 53.74"-L x 7.03"-W x 7.62"-H
Weight: 22.7 lb
Voltage: Universal 120-277V AC, 50/60 Hz or 11-25V AC/DC
Lamp Qty: (2)
Lamp Wattage: 28 Watts Per Lamp
Total Watts: 56 Watts
Lamp Lumens: 3,500 lms
Lumens on Battery Power: 3,500 lms
Total Lumens: 7,000 lms
Luminous Efficacy: 125 Lm/w
Lamp Life Expectancy: 50,000+ Hours
Lamp Color Temperature: 5600K, 5000K, 4500K, or 3000K
Color Rendering Index: >80 CRI
Lamp Type: LED
Lamp Base: -
Replacement Lamp: -
Beam Angle: 150°
Dimming Function: Yes; 0-10V Dimming Capability
Lighting Configuration: Flood
Power Efficiency: 90%
Power Factor: >0.95

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 1598A Marine Type (Saltwater)
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
Made in the USA
BAA Compliant
Silicone Free
CE Certified
Field Serviceable
Failsafe Lighting
Emergency Battery Backup
90+ Minute Runtime
0-10V Dimming Capability

Amps: 0.47A @ 120V, 0.25A @ 220V, 0.23A @ 240V, 0.20A @ 277V
Battery AC Input Voltage: 120/277V AC 60 Hz
Battery AC Input Current: 90 mA
Battery AC Input Power Rating: 9.5W
Battery Output Current: 120V @ 165mA - 277V @ 72mA
Illumination Time: 90+ Minutes
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: -40°C to +65°C
Operating Temp Rating: T4
Minimum Operating Temp: -30°C
Maximum Case Temp: +90°C
Housing Material: Copper Free Aluminum Extrusion 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 HAL-EMG-48-2L-LED-D-V2 from Larson Electronics is a Hazardous Area LED Emergency Light Fixture that is NRTL Listed for United States and Canada, approved for Class I Division 2 Groups A, B, C and D, NRTL Certified to UL 1598A, and ideal for hazardous locations where flammable chemical/petrochemical vapors may be occasionally encountered. 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 four foot long, two lamp 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 HAL-EMG-48-2L-LED-D-V2 fixture is a Class I Division 2 Groups A, B, C and D hazardous area LED light that takes the reliability and efficiency of a fluorescent fixture and adds even longer lamp life and efficiency with high output LEDs. This fixture is T4A temperature rated and comes standard with our high power 28 watt LED lamps. The lamps are protected by an aluminum framed shatter and heat resistant clear acrylic lens secured with ten draw latches and the fixture is constructed of copper free aluminum alloy. The lamp reflector is corrosion resistant heavy gauge aluminum and coated with a high gloss reflective finish. A factory installed terminal strip within the light fixture allows operators to wire multiple fixtures in series, reducing installation cost. The internal terminal strip accounts for dimming control wires (violet/grey) for dimming multiple fixtures in series from a single switch.

This LED light fixture features 0-10V dimming capabilities. This gives operators the ability to manually adjust the brightness of the LED lamp quickly and easily. The 0-10V dimming allows for adjustments to fit the brightness needs of any lighting situation. A 0-10V dimmable light works through the use of a DC control signal that ranges between zero and ten volts. The basic idea is that at 10 volts of input the light is at its brightest level with 0 volts being the lowest possible dimness setting. The smooth, continuous and flicker-free dimming of a 0-10V dimmable LED light is ideal for a wide range of different lighting applications.

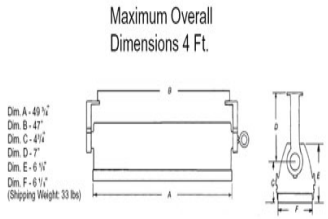
This emergency backup LED light works, mounts and is wired like our HALP-48-2L-LED explosion proof LED light fixtures. The main difference is that we add a battery backup unit that adds emergency light functionality to the fixture. With an integrated emergency ballast, this explosion proof LED light will continue to operate one LED lamp for 90 minutes at 3,500 lumens after the main electrical power to the light is severed. Once standard electrical power is restored, the emergency battery pack will be recharged. The battery backup unit includes a switched leg for turning the light fixture on/off without kicking the unit into emergency mode.

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Click Photo to Enlarge



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Surface Mount



Pendant Mount

We now offer our second generation LED tube lamps with this fixture which have increased this hazardous location light's performance. This two lamp HAZLOC LED linear fixture is lighter in weight and produces more light than hazardous location fluorescent fixtures. The four foot long LED tube design bulbs included with this unit are rated at 50,000 hours of service life, which is over twice as long as standard T8 bulbs.

This fixture carries a T4A temperature rating and is NRTL Certified to UL 595 and UL 1598A Marine Type approved for use in marine environments. The HAL-EMG-48-2L-LED-D-V2 is weatherproof and provides operators in hazardous locations with a highly efficient, reliable and affordable lighting solution for open areas where flammable chemicals and vapors may occasionally be present. Click here to read the NEC description for explosion proof and hazardous locations.

We have eliminated the ballast normally associated with fluorescent fixtures which reduces overall weight and overall complexity of installation. There is no ballast in this unit and the included LEDT8-28W-V1 LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. The solid state design of the LED lamps give this fixture superior resistance to damage from vibration, extremes in temperature and a lamp service life over twice that of standard fluorescent bulbs. This second generation lamp is offered in 5600K cool white, 5000K natural white, 4500K natural white, and 3000K warm white. Please make your selection when ordering.

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 a polycarbonate lens 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 28 watt LED lamps produce 30% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. Each lamp produces 3,500 lumens at 125 lumens per watt, for a combined 7,000 total lumen light output. An HAL-48-2L-T8 hazardous location fluorescent light, with a combined total of 64

watts, draws 0.54 amps at 120 volts AC. This LED version of the same light, with a total of 56 watts, draws only 0.47 amps at 120 volts AC. This results in a lower amp draw while still providing increased reliability and light output.
The HAL-EMG-48-2L-LED-D-V2 is universal voltage, not multi-tap, and operates on any voltage from 120V to 277V AC 50/60hz without any modifications. The internal LED driver is a "smart" driver, sensing the incoming voltage and adjusting accordingly to provide the current required by the lamp. This allows operators to simply wire the fixture to voltage within the 120-277V range, no modifications required. This includes commonly found voltages such as 120V 60Hz, 220V 50Hz, 240V 60Hz, and 277V 60Hz. We also offer a 12/24V AC/DC version for low voltage applications for AC or DC power. Low voltage fixtures require no modifications between 12V and 24V power sources, nor between alternating and direct current supply.

Energy Consumption Comparison

	T5HO	T8	LED
Wattage	108 watts	64 watts	56 watts
Amp Draw @ 120V AC	0.90 amps	0.54 amps	0.47 amps
Amp Draw @ 220V AC	0.49 amps	0.29 amps	0.25 amps
Amp Draw @ 240V AC	0.45 amps	0.27 amps	0.23 amps
Amp Draw @ 277V AC	0.39 amps	0.24 amps	0.20 amps
Amp Draw @ 12V DC	9 amps	5.34 amps	4.67 amps
Amp Draw @ 24V DC	4.5 amps	2.67 amps	2.34 amps
Lamp Life Expectancy	20,000 hours	24,000 hours	50,000 hours
Operation cost per year (12hs/day @ 12c/kWh)	$56.77	$33.64	$29.43

Mounting Options: Unless otherwise specified, our standard, most popular configuration is the bracket end mounting 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. A sliding bracket mount is available so operators can retrofit this LED light fixture to use the per-existing mounting holes from other fluorescent fixtures. Below, in the related items area you can order the sliding mount bracket option.
Adjustable Surface Mount Brackets: Each bracket is cinched to the bracket mounting peg on each side of the light. The angle of the bracket is set by tightening two cap screws on either side of the bracket. The cap screws act as a set screw. The bracket itself is mounted via a single bolt hole at the top the bracket. There are two brackets, one on each end of the light. Once the brackets are mounted to a surface (ceiling, floor, or wall), the light fixture can be removed from the brackets by loosening the cap screws that hold the bracket to the mounting peg.
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: Aircraft maintenance, oil drilling rigs, refineries, marine and salt water environments, ships, tankers, offshore, solvent and cleaning areas, gas processing plants, chemical manufacturing, waste treatment plants, gas processing plants.
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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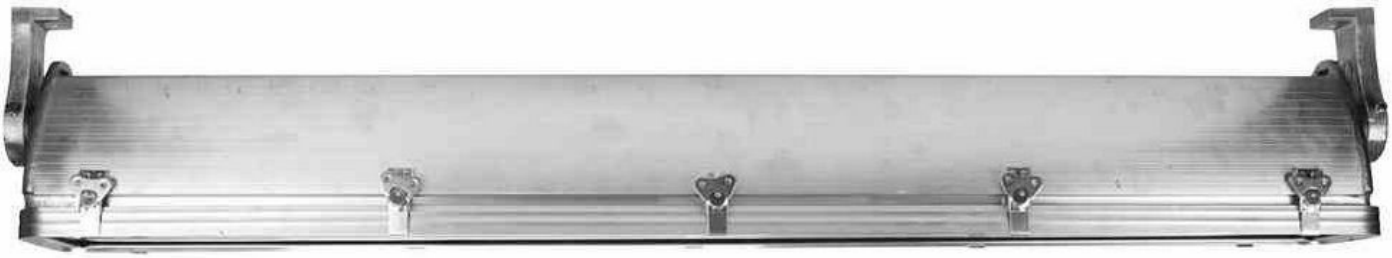
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Frequently Asked Questions (FAQ)









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Product ID: 144257

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

HAL-EMG-48-2L-LED-D-V2-Voltage-Color Temp-Mount

Example: HAL-EMG-48-2L-LED-D-V2-1227-5600K.CLR-SFC.0.75IN

Voltage	
120V-277V	-1227
12-24V AC/DC	-1224

Color Temp	
5600K CLEAR	-5600K.CLR
5600K HI FROST	-5600K.HIFRST
5000K CLEAR	-5000K.CLR
5000K HI FROST	-5000K.HIFRST
4500K CLEAR	-4500K.CLR
4500K HI FROST	-4500K.HIFRST
3000K CLEAR	-3000K.CLR
3000K HI FROST	-3000K.HIFRST

Mount	
SURFACE 3/4IN	-SFC.0.75IN
SURFACE 1/2IN	-SFC.0.5IN
PENDANT 3/4IN	-PND.0.75IN
PENDANT 1/2IN	-PND.0.5IN

Links (Click on the below items to view):

- Dimensional Drawing 2D
- MSDS (Material Safety Data Sheet
- Operations Manual
- SpecSheetSpanish
- Wiring Diagram
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map