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HALSS-ADC-48-2L-LED-D-V2

56W Hazardous Location LED Fixture - C1D2 - Stainless Steel - Dimmable - DALI Network

Product ID: 153725

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.

HALSS-ADC-48-2L-LED-D-V2 Hazardous Location 0-10V Dimmable LED Lighting

ETL Listing: United States
Dimensions: 9.5"W x 54"L x 6.75"H
Weight: 35 lbs
Total Watts: 56 watts
Total Lumens: 6720
Voltage: 120-277 Volts AC 50/60hz or 12-24 Volts DC
Lamp Life Expectancy: 50,000 Hours
Efficiency: 90 Lumens per Watt
Beam Angle: 150°
Color Temp: 5600K, 4500K, or 2700K
Temp Range: T4C Rated -30°C to +85°C
Minimum Operating Temp: -30°C
Maximum Case Temp: +90°C
Mounting: Flange Type Surface or Pendant Mount
Wiring Hub: 1/2 inch threaded

Approvals/Ratings

Class I Division 2, Groups A, B, C, D
UL 595 outdoor marine
UL 1598A Marine Type (Saltwater)
Meets US Coast Guard specifications
0-10V Dimmable
Password Protected Network Controls
No Programming Required
Modbus TCP/IP Connectivity
DALI or Push Dim
PWM Output Signal

Signal Converter Specs

Watts: 0.5W
Input Voltage: 90-306V AC or 127-431V DC @ 47- 63Hz
Current: 0.1A
Input Signal: DALI or Push Dim
Output Channels: 4

Output Signal: PWM

Output Logic: Active High or Active Low

Dimming Range: 1-100%

Relay Switch: 240V AC, On/Off

Operating Temperature: -30? to +60?

Housing Material: Fully Isolated Plastic

Connection: Terminals (TB1, TB2 and JP1)

Analog Output Module Specs

Dimensions: 1.41" x 3.88" x 3.1"

Weight: 4.8 oz

Network Type: 10/100 Base-T Ethernet Port (Static IP address assignment or DHCP, HTTP Port Selectable)

Protocols: HTTP, XML, Modbus TCP/IP

Voltage: 9-28V DC

Max Current: 92mA-163mA @ 24V DC (10 Mbps Network Speed; 126mA-198mA @ 24V DC (100 Mbps Network Speed)

Configurable Channels: 5

Output Ranges: 0-5V, 0-10V, ±5V, ±10V, 4-20mA (Software Selectable)

Resolution: 16-bit DAC (0-65535)

Current Output (Voltage Mode): 10mA Max (Min Load = 1K), 30mA Max Short Circuit

Voltage Output Inaccuracy: ±0.2% FSR Includes Offset Error, Gain Error and Non-linearity Error

Max Load Capacitance: 20nF (no load), 5nF (1K load)

Current Output Range: 4-20mA

Output Compliance Voltage: 11.50V Minimum

Isolated Power Supply: Internal DC to DC Converter

Isolation: Galvanic, 1500V AC

ESD Protection: Integrated, 15kV Protection

Output Protection: Integrated Over-temperature, Open-line and Short Circuit Protection

Output Alarms: Open Current Loop, High Internal Temperature

Output @ Power Up: Programmable

LED Indicators: (8) Power On, Fault Condition (Channels 1-5), Network Linked, Network Activity

Operating Temperature: -40°C to 65.5°C

Housing Material: Lexan 940 Polycarbonate Plastic

Mount: Surface, Wall or DIN Rail

Password Protection: Yes @ Setup (Base 64 Encoding, 13 Characters)

Connectors: 12-position/Removable (Power/Outputs), 8-pin RJ-45 (Network)

Special Orders - Special Requirements

Contact us for special requirements

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Made in the USA

The HALSS-ADC-48-2L-LED-D-V2 Hazardous Location LED Fixture from Larson Electronics is an ETL approved connected lighting solution for Class I Division 2 Groups A, B, C and D environments. Equipped with a DALI-PWM signal converter, this hazardous location LED light has a T4 temperature rating and carries a United States Coast Guard approval. Controls for the dimmable explosion proof LED unit is facilitated by an analog output module using Modbus TCP/IP protocol. No programming is required during setup.

This four foot long, two lamp 0-10V dimmable 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 HALSS-ADC-48-2L-LED-D-V2 hazardous area 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 304 stainless

steel housing, a poured in gasket for reliable sealing, and an impact resistant acrylic diffuser. Our LED T series lamps included with this fixture add greater light output, longer lamp life and add even better resistance to damage from vibration and impacts. Corrosion resistant stainless steel latches secure the lamp cover to the housing and provide a firm lock against the poured in seal to prevent drips and water intrusion.

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.

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 is UL 844 rated and Class I Division II, Groups A, B, C, D approved. The HALSS-ADC-48-2L-LED-D-V2 also carries UL 1598A and UL 595 outdoor marine ratings and meets US Coast Guard specifications. This lamp 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.

Click here to read the NEC description for explosion proof and hazardous locations.

Aevum Network Controlled Lighting Solution: The Aevum Network Controlled Lighting Solution from Larson Electronics enables connected and intelligent illumination using cutting-edge and existing networks. Using Modbus TCP/IP or DALI (for fixtures with dimming features), businesses can seamlessly control lights and sensors from remote locations, without traditional light switches. Web-based panels facilitate real-time monitoring of connected equipment and allows operators to switch units on/off, configure activation settings and more. Businesses may utilize their own systems and software with these controllers, ensuring robust flexibility and cost savings (no contracts). The Aevum Network Controlled Lighting Solution can improve productivity in the workplace by automating basic lighting controls and making lighting controls widely accessible in the facility, via local networks or the internet. Operators also have the option to monitor the status of fixtures from a remote location, which can improve maintenance and reduce downtimes. Larson Electronics offers equipment and accessories required for a DALI network.

Controls: Controls for the LED fixture is accessible using a web-based control panel. Compatible with HTTP, XML, or Modbus TCP/IP protocols, network configuration is accessible using web-based pages (no programming required). Operators can monitor or setup controls from a remote area using the internet or local IP network and any standard web browser. Protective features include: integrated 15kV protection (ESD protection), integrated over-temperature, open-line and short circuit. Output alarms can be set for open current loop and high internal temperature. LED indicator lights on the device provide the real-time information about power, fault condition for all 5 channels and network link/activity. Password protection for the setup page is available (13 characters maximum). Operators can upload scripts during setup using the web-based panel.

Signal Converter: The LED lighting system is equipped with a signal converter, which converts DALI signals to PWM signals. This component features built-in push dim functionality and a comprehensive dimming range of 1-100%. A total of four output channels can be found on the DALI-PWM signal converter. Selectable output PWM logic includes active high (factory setting) or active low.

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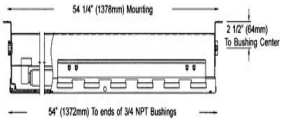



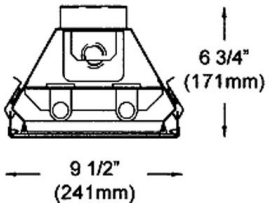

We have eliminated the ballast box normally associated with fluorescent fixtures which reduces overall weight and creates a slimmer unit profile. There is no ballast in this unit and the included LEDT8-28W-V1 LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly 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.

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 3360 lumens at 120 lumens per watt, for a combined 6720 total lumen light output. A 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. The HALSS-ADC-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. We also make a 12/24V AC/DC version for low voltage applications for AC or DC power.

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
Color Temperature	5000K / 4100K	4100K	5600K
Operation cost per year	$56.77	$33.64	$29.43

(12hs/day @ 12c/kWh)

This fixture is designed for heavy duty use in applications where intense vibration and corrosive environments may be encountered. Stainless steel construction, high impact acrylic lamp covers, and a Class 1 Division 2 ETL rating make this light ideal for hazardous areas that require illumination with above average dependability.

Network: The analog output module is equipped with five configurable channels. This unit works with 10/100 Base-T ethernet ports and allows static IP address assignment or DHCP, HTTP port selectable during setup. Compatible with 9-28V DC, the module features a 12-position, removable connector for power and outputs, as well as an accessible 8-pin RJ45 port. Operators can mount the device on walls, surfaces or din rails for space-saving benefits.

Mounting Options: Unless otherwise specified, our standard, most popular configuration is the adjustable surface 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.

Adjustable Surface Mount Brackets: Two stainless steel L-brackets, one on each end of the fixture, enables it to be simply secured to any flat surface. Three through holes provide sufficient mounting for any environment. The angle of the bracket is set by tightening two set screws on either side of the bracket. Once the brackets are mounted to a surface (ceiling, floor or wall), the light fixture can be repositioned by loosening the cap screws, angling the light for maximum illumination, and secured in place by re-tightening the set screws on each mounting bracket.

Suspension Mounting: Pendant mount fixtures hang from the ceiling and are suspended by rigid pipe. Each fixture is equipped with two 1/2” 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 HALSS-ADC-48-2L-LED-D-V2 is designed for DALI lighting networks, marine wet and damp locations, where corrosion resistant fluorescent lights are required. This lamp is also ideal for locations where heavy vibratory conditions are 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 for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)



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HALSS-ADC-48-2L-LED-D-V2

Product ID: 153725

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

HALSS-ADC-48-2L-LED-D-V2-Voltage-Color Temp

Example: HALSS-ADC-48-2L-LED-D-V2-1227-56K

Voltage	
120-277V AC	-1227
11-25V AC/DC	-1224

Color Temp	
5600K	-56K
4500K	-45K
2700K	-27K

Links (Click on the below items to view):

- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- HigResPic10
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map