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EPL-ADC-48-2L-ITG-LED-D-V2

Explosion Proof LED Paint Spray Booth Light - C1D1 - 8000 Lumens - Dimmable - DALI Network

Product ID: 153746

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.

Specifications / Additional Information

EPL-ADC-48-2L-ITG-LED-D-V2 Explosion Proof Dimmable LED Fixture

NRTL Listed for United States & Canada
Dimensions: 11.25"W x 52"L x 8.5"H
Weight: 55 lbs
Voltage: Universal 120-277VAC 50/60 Hz
Total Watts: 80 watts
Total Lumens: 8,000
LED Lamp Life Expectancy: 50,000+ Hours
Luminous Efficiency: 100 Lumens per Watt
Color Temp: 5000K
Color Rendering Index: >80
Beam Angle: 150°
Power Efficiency: 90%
Power Factor: >0.95
Ambient Operating Temp Range: -30°C to +85°C
Operating Temp Rating: T6 Rated
Minimum Operating Temp: -30°C
Maximum Case Temp: +90°C
Housing Material: Cast Aluminum End Caps, Aluminum Reflectors - Copper Free
Lens Material: Hardened Borosilicate Glass Tubes
Gasket Material: Buna Rubber O-Rings
Mounting: Surface Standard - Pendant Optional
Wiring Hub: 1/2" NPT

Ratings/Approvals

Class I Division 1, Groups C and D T6
Class I Division 2, Group A,B,C,D
Class II, Divisions 1 & 2, Groups E,F,G
NRTL Certified to UL 595 Marine Type (Saltwater)
NRTL Certified to UL 844
NRTL Certified to UL 1598 Marine Type
Certified Canadian Standards
Listed for Paint Spray Booths
California Title 24 Compliant
IP67 Rated - Waterproof
T6 Temperature Rating
NEMA 4X
LEL Listed LED Lamps
Approved for Confined Spares
Silicone Free
Factory Sealed Fixture
Individually Dimmable Lamps
0-10V Dimming Capability
Made in the USA
Password Protected Network Controls
No Programming Required
Modbus TCP/IP Connectivity
DALI or Push Dim

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)

PWM Output Signal

Special Orders - Special Requirements

Contact us for special requirements

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Made in the USA

The EPL-ADC-48-2L-ITG-LED-D-V2 Explosion Proof LED Paint Spray Booth Light from Larson Electronics is a NRTL Listed for United States and Canada connected lighting system for Class I, Divisions 1 & 2 and Class II, Divisions 1 & 2 locations. Equipped with a DALI-PWM signal converter, this integrated explosion proof LED light has a T6 temperature rating and carries a paint spray booth light certification. 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, two lamp integrated dimmable LED fixture is ideal for operators seeking a top quality explosion proof LED light that will reduce operating costs, improve lighting quality and reduce downtime incurred from frequent servicing intervals. The EPL-ADC-48-2L-ITG-LED-D-V2 is equipped with a specially designed integrated LED assembly which produce 8,000 lumens, 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.
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 first generation integrated LED tube assembly within this fixture which have increased this 0-10V dimmable hazardous location light`s performance. This two lamp explosion proof LED linear fixture is lighter in weight and produces more light than traditional explosion proof 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 T5HO bulbs. These lamps are individually dimmable via Mark 7 0-10V style dimmer switches for maximum control over illumination levels.
This fixture carries a T6 temperature rating and is approved for Class I Division 1, Groups C and D, Class I, Division 2, Group A, B, C and D, and Class II, Divisions 1 and 2, Groups E, F and G environments where flammable or combustible gases, vapors, dusts, fibers, and flying exist or stand the potential to exist. This LED linear fixture is approved for use in confined spaces. 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.



SURFACE MOUNT (STANDARD)

Click Image to Enlarge



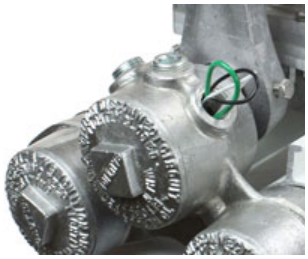
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Click Image to Enlarge



PENDANT MOUNT (OPTIONAL)





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.

The dual 40 watt LED assemblies produce 50% more illumination than standard T5HO bulbs while offering lower amp draw and increased reliability. Each lamp produces 4,000 lumens at 100 lumens per watt, for a combined 8,000 total lumen light output. An EPL-48-2L-T5HO explosion proof fluorescent light, with a combined total of 104 watts, draws 0.87 amps at 120 volts AC. This LED version of the same light, with a total of 80 watts, draws only 0.67 amps at 120 volts AC. The EPL-ADC-48-2L-ITG-LED-D-V2 is universal voltage, not multi-tap, and operates on any voltage from 120V to 277V AC 50/60hz without any modifications.

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.

Energy Consumption Comparison

	T5HO	T8	LED
Wattage	108 watts	64 watts	80 watts
Amp Draw @ 120V AC	0.90 amps	0.54 amps	0.67 amps
Amp Draw @ 220V AC	0.49 amps	0.29 amps	0.36 amps
Amp Draw @ 240V AC	0.45 amps	0.27 amps	0.33 amps
Amp Draw @ 277V AC	0.39 amps	0.24 amps	0.29 amps
Amp Draw @ 12V DC	9 amps	5.34 amps	6.67 amps
Amp Draw @ 24V DC	4.5 amps	2.67 amps	3.34 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	$42.04

Our EPL-ADC-48-2L-ITG-LED-D-V2 0-10V dimmable LED light fixture is NRTL Listed for U.S. and Canada approved for use in paint spray booths. Please note, according to the NEC, using threaded rigid pipe does not require additional seal offs with this fixture. An EYM and seal off is necessary for flex conduit or other non-rigid pipe implementations.
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.
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 features a 1/2" NPT junction box on one end, and a 1/2" NPT adjustable L-bracket on the other end of the fixture. Operators bring rigid pipe down to the threaded mounting hubs. Wiring is fed down through the rigid pipe to the junction box and tied in to the fixture's lead wires, completing the electrical connection. The adjustable L-shape mounting bracket provides support for the opposite end of the fixture.
Suggested Applications: DALI lighting networks, remote lighting networks, warehouses, industrial buildings, paint spray booths, aircraft maintenance, oil drilling rigs, refineries, 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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Frequently Asked Questions (FAQ)









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Product ID: 153746

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:

EPL-ADC-48-2L-ITG-LED-D-V2-Mount

Example: EPL-ADC-48-2L-ITG-LED-D-V2-SFC

Mount	
SURFACE	-SFC
PENDANT	-PND

Links (Click on the below items to view):

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