

## INDUSTRIAL POWER OVER ETHERNET (PoE) INJECTORS

**Pass Power & Data to your Ethernet Field Devices over the same Cable.**

The EB-PSE-24V-1 or EB-PSE-48V-2 industrial PoE power injectors add 48 VDC power into 1 or 2 Ethernet ports so that you can pass power and data over the same wire to your Ethernet devices in the field. The 24V-1 model steps up your 24 VDC for sourcing 1 PoE port so no separate DC/DC converter is required. The 48V-2 model is two injectors in one to save space and money. Both are ultra-rugged, reliable and easy to use.

### PRODUCT HIGHLIGHTS

- Simplify System Wiring
- Reduce Maintenance Time
- Save Money
- Fully IEEE 802.3af compliant PSE (Power Sourcing Equipment) operation
- Model 1 directly runs off of your existing 24 VDC and powers 1 PoE (48 VDC) port
- Model 2 saves you space and money by powering 2 PoE (48 VDC) ports
- Industrial rated for -40 to 75°C operation

### IEEE 802.3AF COMPLIANT PoE PORTS

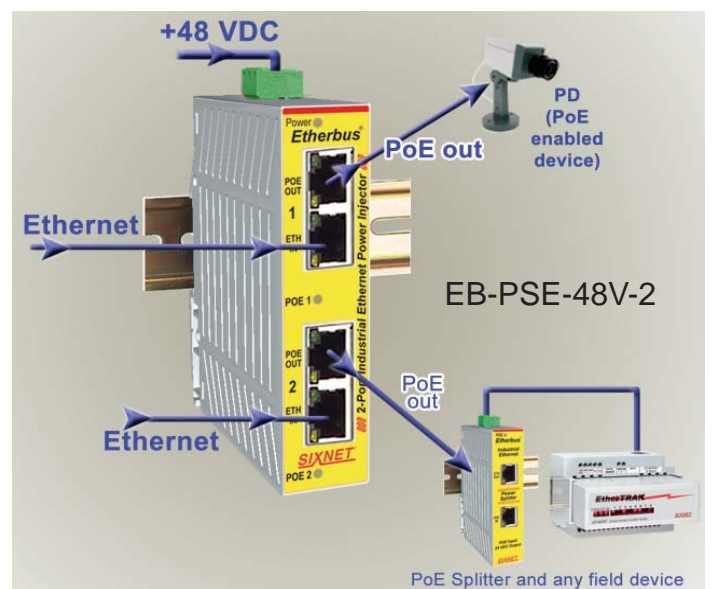
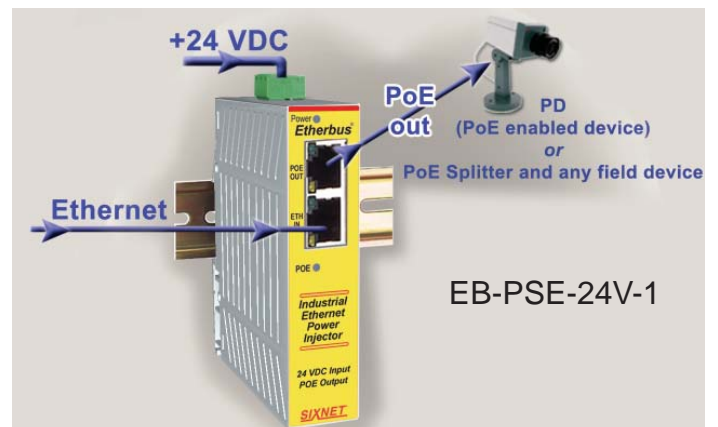
- Power Sourcing Equipment (PSE) operation
- Auto-detection of PD (powered devices)
- Supplies up to 15.4 watts per channel
- Over-temperature and over-current detection
- Over and under-voltage protection

### TRUE PLUG AND PLAY SIMPLICITY

- No user settings
- Ready to use right out of the box

### TROUBLE FREE OPERATION

- Ultra-reliable 1,000,000+ hours MTBF
- Slim package for DIN rail or panel mounting



**GENERAL**

- Ethernet protocols supported: All IEEE 802.3
- Ethernet connectors per channel: 2  
(1 for Ethernet in, 1 for PoE out)
- Ethernet port standards: 10/100BaseTX IEEE 802.3 / 802.3u

**PoE OUTPUT**

- Fully IEEE 802.3af compliant
- IEEE 802.3af PoE operation: Power Sourcing Equipment (PSE)
- PoE power output
  - 48 VDC @ 15.4 Watts per channel
  - 24V model: Derate 1W per 2°C over 60°C
- RJ45 PoE pin assignments
  - A=unused pair: TX(3,6); RX(1,2); V-(7,8); V+(4,5)
  - B=signal pair: TX/V- (3, 6); RX/V+ (1, 2)
- PoE operation: Auto-detection & power management
- PoE disconnect mode: AC for 24V-1 and DC for 48V-2
- PoE protection: Over-temp, over-current, over/under-voltage & transient

**POWER INPUT**

- Fully IEEE 802.3af PoE compliant
- Power input for 48V-2 models: 45-56 VDC @ 31 Watts max.
- Power input for 24V-1 models: 18-30 VDC @ 20 Watts max.
- Transient protection 15,000 watts peak
- Spike protection 5,000 watts (10 times for 10 uS)

**ENVIRONMENTAL**

- Operating temperature range: -40 to +75°C (cold startup @ -40°C)
  - 24V model: Derate 1W per 2°C over 60°C
- Storage temperature range: -40 to +85 °C
- Humidity (non-condensing) 5 to 95% RH
- Vibration, shock and freefall: IEC68-2-6, -27 and -32

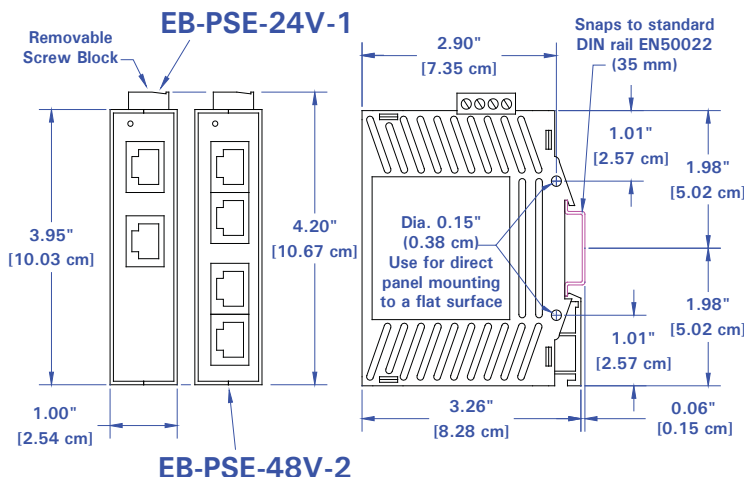
**STANDARDS COMPLIANCE**

- Electrical safety:UL508/CSA C22.2/14; EN61010-1, CE
- EMI emissions: FCC part 15, ICES-003; EN61000-6-4, CE
- EMC immunity: IEC61000-6-2, CE
- Hazardous locations: UL1604, CSA C22.2/213 (Class I, Div. 2); EN60079-15 (Zone 2; Category 3), CE (ATEX)

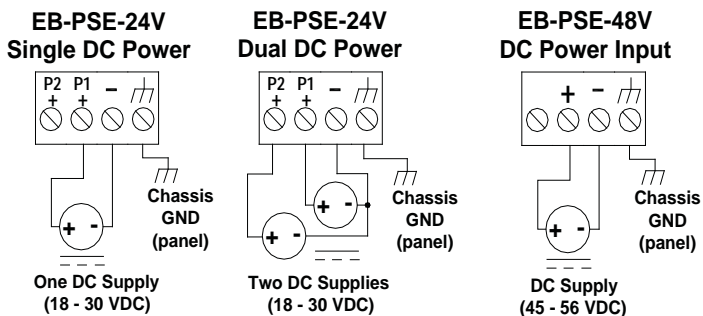
**PHYSICAL**

- DIN rail or direct panel mounting
- Packaging - Polycarbonate with IP30 protection
- Weight (approximate): 0.17 Kg (0.25 lbs)
- Dimensions - 4 x 1 x 3.3" (10 x 2.5 x 8.3 cm)
- MTBF (estimated): >1,000,000 hours

**MECHANICAL DRAWING**



**POWER WIRING**



All specifications are subject to change. Consult factory for latest info.

**ORDERING GUIDE**

- EB-PSE-24V-1A PoE injector for 1 PoE port (uses unused pairs), 24V input
- EB-PSE-48V-2A PoE injector for 2 PoE port (uses unused pairs), 48V input
- EB-PSE-24V-1B Special order: uses signal pairs for PoE, ideal for 4 wire cables
- EB-PSE-48V-2B Special order: uses signal pairs for PoE, ideal for 4 wire cables

**ACCESSORIES**

- EB-PS-AC48-75 Industrial power supply, AC to 48 VDC, 75W, 1.5A
- EB-PS-AC48-120 Industrial power supply, AC to 48 VDC, 120W, 2.5A
- EB-PD-24V-1 PoE splitter for 24VDC devices, 13W (Other voltages available – special order)



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Datasheet EB-PSE-XXV  
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