EB-PSE Industrial PoE Injectors

Sixnet Networking Series

red lion®

▶▶▶ **Industrial Power over Ethernet 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.

APPLICATIONS

> Video and security

> Industrial automation and control

> Fully IEEE 802.3af compliant PSE (Power Sourcing Equipment) operation

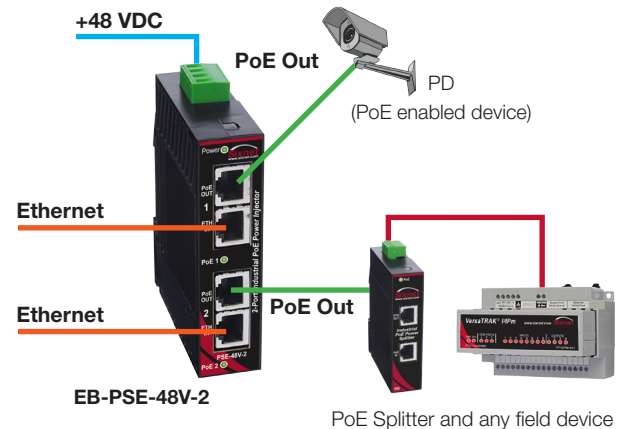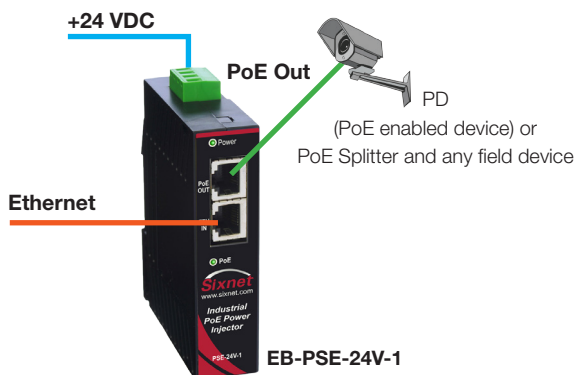## PRODUCT HIGHLIGHTS

> Process machine and motion control

> 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

FEATURES & BENEFITS

> 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

+24 VDC

PoE Out

PD
(PoE enabled device) or
PoE Splitter and any field device

Ethernet

EB-PSE-24V-1

+48 VDC

PoE Out

PD
(PoE enabled device)

Ethernet

Ethernet

PoE Out

EB-PSE-48V-2

PoE Splitter and any field device

FCC   UL LISTED 65SN   CE   РСТ   RoHS compliant

SWITCH PROPERTIES

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

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

OPTIONS

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)

SUBMITTED FOR TESTING

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)
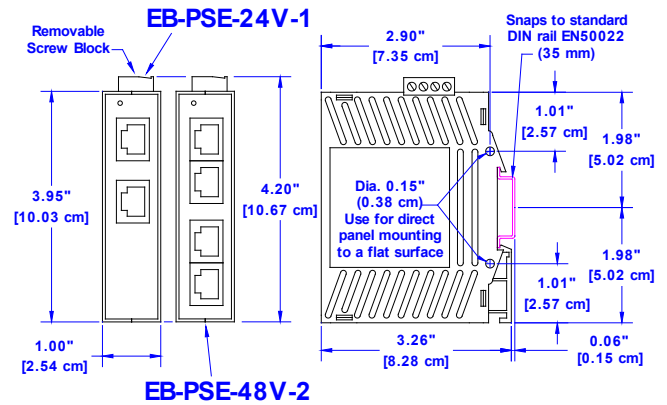
ENVIRONMENTAL

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
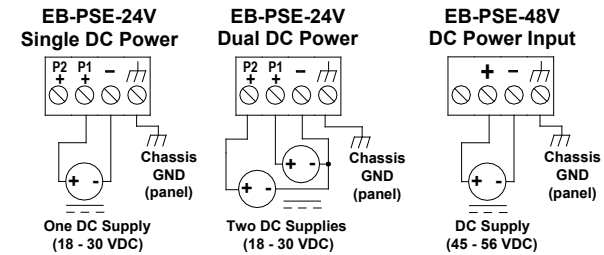Vibration, shock and freefall: IEC68-2-6, -27 and -32

MECHANICAL

DIN rail or direct panel mounting
Packaging - Lexan 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

DIMENSIONS

POWER WIRING

ORDERING GUIDE

PART NUMBER	DESCRIPTION
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

PART NUMBER	DESCRIPTION
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.

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

As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our award-winning technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. For more information, please visit www.redlion.net. Red Lion is a Spectris company.