# SIXNET

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# **Etherbus**®

## Industrial Power over Ethernet (PoE) Splitter

#### Power non-PoE or non-Ethernet Devices from your PoE Lines

These space saving industrial PoE splitters give you all the benefits of Power over Ethernet (PoE) without needing to upgrade your existing non-PoE Ethernet devices. These splitters generate isolated 24 VDC power for your non-PoE or even non-Ethernet devices. Think of this splitter as an industrial 24 VDC power supply that is powered by your incoming PoE (Etherbus) cable. The Ethernet output can be connected to any traditional (non-PoE) Ethernet device. These industrial splitters are ultra-rugged, reliable and easy to use.

#### **Product Highlights**

- One IEEE 802.3af compliant Power over Ethernet (PoE) port
- One Ethernet output port where the 48 VDC has been removed
- Plug & play saves you time and money
- Truly industrial rated for any application

#### IEEE 802.3af compliant PoE input port

- Powered Device (PD) operation
- Accepts power over signal or unused pairs
- Supports power detection & classification

#### True isolated power

- 24 VDC power output (12/14V also available)
- 13 watts of power available

#### True plug and play simplicity

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

#### SIXNET reliability and long-term support

- Ultra-reliable 1,000,000+ hours MTBF
- 20-year support and service promise

#### Industrial tough – ready for any application

- Truly industrial -40 to 75°C operation
- DIN rail or direct panel mounting

#### Certified to Perform:

**Certified Community** 





European



Hazardous

Locations



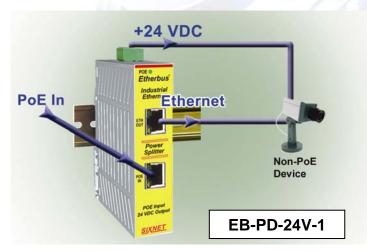


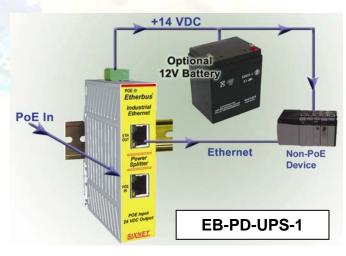
USA/Canada Lead & Hazardous Emissions Substance Free



#### Etherbus® Industrial Fieldbus Solutions

Like a true fieldbus, Etherbus® combines all the advantages of Ethernet (speed and openness) with power in the same cable to simplify system wiring, reduce maintenance time and save you money. At the heart of Etherbus are standard Ethernet (802.3) and PoE (802.3af) making it truly open. Etherbus is "Every bus" because it passes any and all Ethernet message packets regardless of origin or protocol. Etherbus works with Modbus/TCP, Profinet, Ethernet/IP, ... (the list is endless). Etherbus works with PoE devices as well as non-PoE devices. It can even deliver standard +24 VDC to your field mounted devices – even non-Ethernet devices. For more details contact SIXNET for the Etherbus brochure.





Performance Specifications		
General	Industrial PoE Splitter	
Ethernet protocols supported	All IEEE 802.3	
Ethernet ports	2 (1 for PoE in, 1 for Ethernet out)	
Ethernet port standards	10/100BaseTX IEEE 802.3 / 802.3u	
PoE Input	Fully IEEE 802.3af PoE compliant	
IEEE 802.3af PoE operation	Powered Device (PD)	
PoE Power input range	45-56 VDC	
PoE power input	Automatic detection and classification (power is accepted on either the signal or unused pairs)	
PoE protection	Over/under voltage lockout and inrush control	
PoE transient protection	15,000 watts peak	
PoE spike protection	5,000 watts (10 times for 10 uS)	
Power Output	Isolated power	
Voltage output	24 VDC, 0.54 Amps (24V model) 14 VDC, 0.93 Amps (UPS model)	
Power output	13 watts	
Environmental	Truly industrial design	
Operating temperature range	-40 to +75 °C (cold startup @ -40)	
Storage temperature range	-40 to +85 °C	
Humidity (non-condensing)	5 to 95% RH	
Vibration, shock and freefall	IEC68-2-6, -27 and -32	
Electrical safety	UL508 / CSA C22.2/14 (CUL); EN61010-1	
EMC emissions and immunity	FCC Part 15 / ICES-003; EN55022 / IEC61326-1	
Hazardous locations	UL1604 / CSA C22.2/213 (CUL), C1, D2; ATEX / Cenelec Zone 2	
Mechanical	DIN rail or direct to panel mounting	
Packaging material and protection	Polycarbonate with IP30 protection	
Dimensions (H x W x D)	4 x 1 x 3.3" (10 x 2.5 x 8.3 cm)	
Weight (approximate)	0.17 Kg (0.25 lbs)	
MTBF (estimated)	>1,000,000 hours	

Specifications are subject to change. Consult factory for latest information.

#### SIXNET knows industrial -

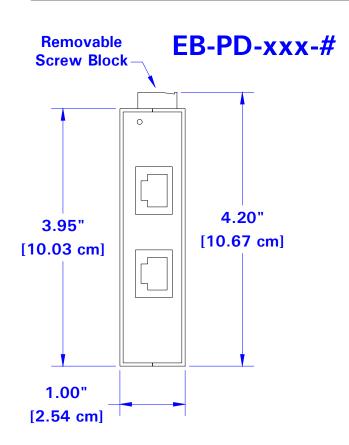
We have been designing industrial hardware such as Remote Terminal Units for over 25 years and have used this expertise to design the toughest industrial Ethernet products on the market. Don't trust your critical communications to so-called "industrial" hardware from commercial manufacturers. SIXNET products give you proven assurance that your system will keep running for years to come.

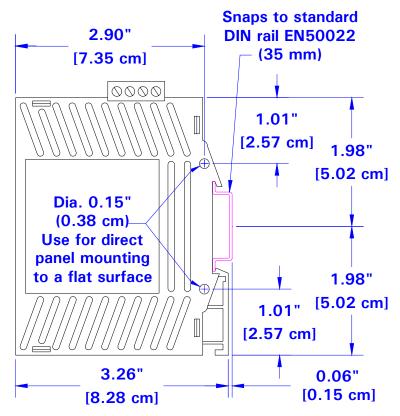
Ordering Guide	
EB-PD-24V-1	PoE splitter to power non-PoE or non- Ethernet 24 VDC devices
EB-PD-UPS-1 (Special Order)	PoE splitter for non-PoE 12/14 VDC devices and/or to charge a 12 VDC battery for UPS backup
Accessories:	
EB-5ES-PSE-#	5 port Industrial Ethernet switch with 4 PoE (power sourcing) ports
EB-PSE-24V-1A	PoE injector for 1 PoE port (uses unused pairs), 24V input
EB-PSE-48V-1A	PoE injector for 2 PoE port (uses unused pairs), 48V input
EB-CAT5E-##	Kevlar reinforced Cat 5E Ethernet cable and cordsets
EB-RJF-BLKHD-1	IP67 quick-latching (1/4 turn) bulk- head (through-wall) connector
EB-RJF-CAP-1	IP67 protective cap for bulk-head connector
EB-RJF-PLUG-1	IP67 field-installable quick-latching (1/4 turn) Ethernet plug



For the latest information on Etherbus products please go to https://www.etherbus.com

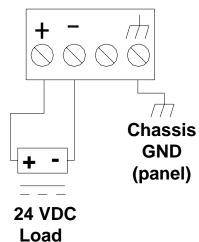
#### **Mechanical Dimensions**



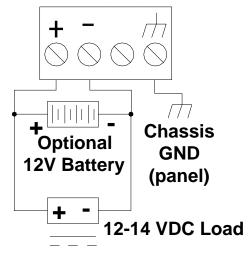


#### **Power Wiring**

### EB-PD-24V DC Power Output



# EB-PD-UPS DC Power Output





### A Complete Family of Etherbus® Solutions

#### Etherbus® Industrial Ethernet PoE Switch

The EB-5ES-PSE combines the ultra-reliability of a five port EtherTRAK Real-time Switch with four industrial PoE sourcing outputs. Simply power this switch with 48 VDC to source the PoE lines. The four PoE ports automatically sense and support both PoE and non-PoE (traditional) Ethernet devices. Or power this switch with10-30 VDC and it functions as a robust industrial switch that is PoE future-ready. Check out the separate datasheet for more details.





#### Etherbus® Industrial Power Injectors

These space saving industrial PoE injectors convert any standard Ethernet cable into a PoE (Etherbus) channel. Now you do not have to run a separate power cable to your remote devices. The one cable supplies both power and data to your PoE-enabled, non-PoE or even non-Ethernet devices (see the PoE splitter below). The EB-PSE-48V-2 model runs on 48 VDC and can source two PoE channels. The EB-PSE-24V-1 model runs directly on your 24 VDC (no extra supply needed) and can source one PoE channel. Stack these slim units on your DIN rail to create multiple PoE sourcing cables. Check out the separate datasheet for more details.

#### Etherbus<sup>®</sup> Industrial Ethernet Cabling

The trademarked Etherbus® cable is the toughest Ethernet cable in the world. Ensure the reliability of your industrial Ethernet systems (indoors or outdoors) with this ultra-rugged Kevlarreinforced Etherbus cable. This Cat 5E cable is double shielded for best noise immunity and has excellent temperature, UV, hydrolysis and microbial resistance. You can install it anywhere with confidence that it will keep working for the long haul. Check out the separate datasheet for more details.





#### **Etherbus® Industrial Ethernet Connectors**

Etherbus features the Amphenol RJField reverse-bayonet quick latching (1/4 turn) connector system. These IP67 rated connectors and plugs are water and corrosion proof. The bulk-head connector allows you to interface between standard Ethernet wiring inside a cabinet to industrial cabling outside. The mating plugs can be easily field installed around an existing Ethernet cable without the need for tools.

Check out the separate datasheet for more details.



#### Etherbus<sup>®</sup> Industrial Power Supplies

SIXNET offers several industrial power supplies to meet your PoE, 24 VDC or 48 VDC power needs. AC to 48 VDC models are available with up to 120 Watts or more. Plus a 48 VDC to 24 VDC compact unit gives you 15 watts of power. This supply is ideal for powering industrial equipment from the 48 VDC power sources found in telecommunication or Etherbus systems. Check out the separate datasheet for more details.

> **Request Your FREE Product CD at** http://www.etherbus.com



Etherbus Splitter Datasheet - Rev 24-Apr-07