



## Power Xpert® Ethernet Switches

Technical Data



### Product snapshot

- **Two switch models to expand industrial Ethernet networks**
- **Adds convenient network connections anywhere**

### Features

- **Simultaneous, full-duplex, high-speed communication on all ports**  
No network performance bottlenecks
- **Hardened for factory floor**  
Ideal for both industrial or data center applications
- **Unmanaged, plug-and-play implementation**  
No software or additional hardware required for configuration
- **Seamlessly integrates into Eaton®'s Power Xpert Architecture**  
Quality and reliability of Eaton guaranteed

### Eaton Power Xpert Architecture

Eaton Power Xpert Architecture provides the framework to unify the entire power system. It connects power systems with communication and management systems to provide a holistic approach to the entire power system. This strategic system-level focus is integral to PowerChain™ Management Solutions. It provides increased reliability, cost efficiencies, enhanced safety and risk mitigation and allows for the more effective use of capital. Eaton Power Xpert Architecture is comprised of both software and hardware components including meters, gateways, time servers and connectivity devices.

### Expand the communication capability of your power system

As Ethernet LANs extend the network beyond the office to the plant floor and facility basement, the possibilities for power system monitoring and management have grown as well. However, these less-than-optimal environments have special requirements to keep the lines of communication open, and the health of the power system intact.

Eaton's Power Xpert Ethernet Switches are ideal for extending Ethernet networks via CAT5 wiring or fiber in harsh, industrial environments. Built with high-grade components and constructed using special thermal techniques, PXE Switches can withstand the unpredictable conditions of such environments.

PXE Switches support IEE 802.3u auto-negotiation and MDI/MDIX auto-cross, enabling a 10 Mb or 100 Mb device to be attached on any port. Two terminals provide connections to monitor an internal power-sense relay. Designed for high ambient temperatures, it is ideal for industrial use, and since no internal air flow is required for cooling, it resists dust, dirt, moisture, smoke and insects. Mounting options include standalone panel-mounting, DIN-Rail mounting, or 19" standard rack mounting.

### PXE 6-port switch - 10/100 Mb with optional 100 Mb fiber

In heavy-duty industrial applications, Ethernet LANs are

often used where small groups of nodes at the edge need to be connected into larger LAN structures. The Power Xpert 6-port switch delivers innovative features to serve edge-of-the-network applications.

This compact switch provides six Ethernet ports, with flexible configurations. The base models have one of three options:

- Two 100 Mb fiber and four 10/100 copper ports
- One fiber and five copper ports
- Six copper ports

The 6-port switch supports loop networks, enabling them to be used in self-healing and redundant LAN environments. This capability allows the switch to sense link loss or standard STP/RSTP reconfiguration signals on designated ports, flush internal address buffers to permit a change in LAN packet flow, and pass the reconfiguration signal down the line to other products in the redundant network structure. PXE Switches, combined with managed switches running STP, RSTP or S-Ring, can provide cost-effective, high-availability redundant LANs.

### PXE 4-port switch 10/100 Mb

For smaller applications requiring fewer connection points and no fiber, the 4-port Power Xpert Ethernet Switch is a versatile option. It provides edge access Ethernet ports in a convenient and compact package.

# Technical specifications

## POWER XPERT ETHERNET SWITCHES

Description	Catalog number
4 port Ethernet switch: copper only	PXES4P24V
6 port Ethernet switch: copper only	PXES6P24V
6 port Ethernet switch: 5 copper/1 fiber (ST connector)	PXES6P24V1ST
6 port Ethernet switch: 4 copper/2 fiber (ST connector)	PXES6P24V2ST

## ACCESSORIES

Description	Catalog number
Power supply (preferred) - DIN rail mount with screw terminals	100 - 240 VAC input: 24 VDC output ELC-PS02
Power supply (alternate) - wall plug in type with 6 ft cord	120 VAC input: 12 VDC output PXESPS12V
DIN rail mounting bracket	PXESDINRL
19" rack mount tray	PXESTRAY

## OPERATING ENVIRONMENT

Ambient temperature ratings	-25°C to 60°C long term per independent agency tests (UL), or -40°C to 85°C short term per IEC Type Tests
Storage temperature	-40° to 185°F (-40°C to 85°C)
Cold start	to -20°C
Ambient relative humidity	5% - 95% (non-condensing)
Altitude	-200 to 50,000 ft. (-60 to 15,000m)
MTBF	> 15 years

## NETWORK STANDARDS

Ethernet IEEE 802.3, IEEE 802.3u, IEEE 802.1p, 100BASE-TX, 10BASE-T, 100BASE-FX

## AGENCY APPROVALS AND STANDARDS COMPLIANCE

UL listed (UL60950), cUL, CE, Emissions meet FCC Part 15, Class A

## POWER CONSUMPTION

7.0 Watts typical; 9 Watts max

## PACKAGING

Enclosure	Robust sheet metal (steel)
Dimensions of PXES4P series	3.5 in H x 3.0 in W x 1.0 in D (8.9 cm x 7.6 cm x 2.5 cm)
Dimensions of PXES6P series	3.6 in H x 3.0 in W x 1.7 in D (9.2 cm x 7.6 cm x 4.3 cm)
Weight of PXES4P series	8.6 oz (243g)
Weight of PXES6P series	13 oz (370g)
Cooling method	Case used as a heat sink

## MOUNTING

Metal panel mounting clips	Included
DIN-rail mounting	Optional
19" rack mount	Optional

NOTE: These specifications are subject to change without notice and represent the maximum capabilities of the product with all options installed. This is not a complete feature list. Features and functionality may vary depending on selected options and product model. Please refer to the technical data sheet and User Manual for detailed specifications. Please see [www.eaton.com/powerxpert](http://www.eaton.com/powerxpert) for latest information.

Eaton Corporation  
Electrical Group  
1000 Cherrington Parkway  
Moon Township, PA 15108  
United States  
Tel: 1.877.ETN CARE (877.386.2273)  
[www.eaton.com](http://www.eaton.com)



PowerChain™  
Management  
Solutions

Eaton, PowerChain, and Power Xpert are trade names, trademarks, and/or service marks of Eaton Corporation or its subsidiaries and affiliates. All other trademarks are properties of their respective owners.

© 2007 Eaton Corporation  
All Rights Reserved  
Printed in USA  
TD02601008E  
October 2007

