

**EPCH Series
Data Line Surge Protection**

Ideal for 19" Relay Rack Applications Supporting Hubs, Routers, Switches, ISDN, T1, Telco and Other High Speed Communications/Networking Equipment

Introduction

The EPCH Series of Protected Patch Panels helps ensure the reliable operation of equipment utilizing CAT5 Ethernet, 100Base-T, T1, ISDN, and telco protocols where system availability is absolutely critical.

EPCHs Offer

- State-of-the-art, avalanche diode and thyristor technology
- Self-resetting, 1500 watt, bi-directional circuit
- Convenient, integral, wiring management system

You Receive

- Affordable, superior, equipment protection
- Improved reliability and maximized system up-time
- Adaptability to most industry applications

The EPCH Series is a 110 IDC to RJ45 patch panel with built-in surge protection. These devices help guard sensitive, high speed communication equipment from system damage, data loss and downtime resulting from the effects of lightning, surges, electrostatic discharge and other induced voltages on data lines. EPCH units include industry-standard, 19" rack-mounting for structured cabling environments, TIA/EIA-568-A compliance, and an extremely fast response time of less than 5 nanoseconds. Convenient, built-in, all-wire protection makes this patch panel cost-effective and a real time saver.

Designed for high-speed data, voice and multimedia applications in structured cabling environments for mid to large-size businesses today, these units incorporate the latest in communication protection technology for mission-critical installations.

The self-resetting, 1500 watt, bi-directional circuit provides maximum reliability. Overvoltages are safely shunted to ground via an 11" braided wire and chassis frame for maximum protection.

Installation

- Remove power to the unprotected equipment
- Mount the patch panel to your 19" relay rack using the supplied hardware
- Disconnect the incoming data lines from the equipment
- Attach the ground strap to your rack. The installer should confirm a proper rack to earth ground connection. Consult with an electrician if needed. Try to keep the resistance from the supplied fork terminal ground to the rack frame minimal. It is imperative that both the EPCH and the equipment to be protected are properly grounded for effective operation.
- Using a 110 punch-down tool, install the cable "22-26 AWG wire" matching the color code on the 110 IDC (Insulation Displacement Contact)
- Maintain pair twist, up to point of termination, for maximum performance (untwist less than 0.5")
- Connect the patch panel to the equipment

Note: These protectors reset themselves after protecting equipment from surges. In the event that lightning or other extreme surge events have exceeded the maximum capability of the protector, these devices are designed to self-destruct in a "fail-safe" mode rather than allow damage to equipment. Installations often require a protector at each end of the data line (call our technical support group with any questions).

Warranty

Eaton Corporation offers a standard 5-year warranty for data communications surge protection. For more information, visit www.EatonElectrical.com.

Electrical Specifications

Specification	Standard Clamp Voltage	Peak Pulse Current (10/1000 us s.c. Waveform @ Vcl)	Response Time	Maximum Shunt Capacitance
10/100Base-T CAT5 Ethernet	12 Volts	97 Amps	< 5 Nanoseconds	<25 pF
ISDN, T1, DDS (Fused)	60 Volts	50 Amps	< 5 Nanoseconds	<75 pF
Dial-up, Modem/Fax (Fused)	240 Volts	75 Amps	< 5 Nanoseconds	<95 pF

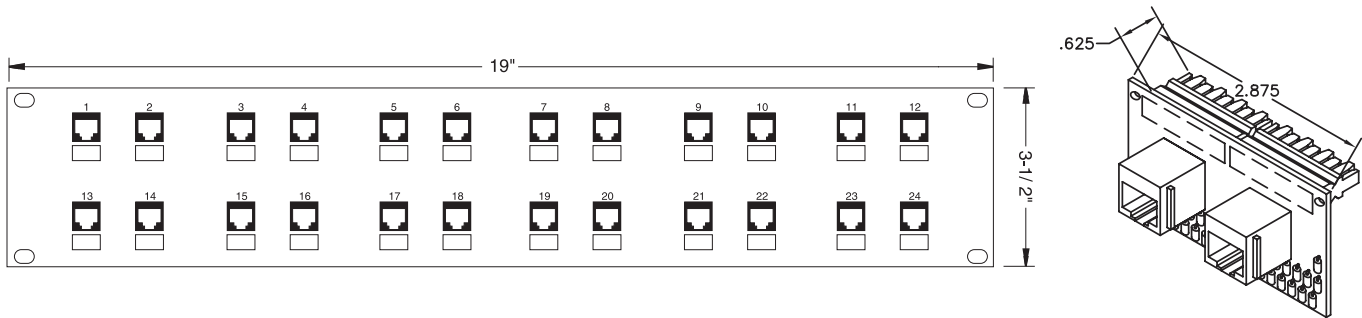
System Application and Catalog Number ^①

Connector Type		10Base-T CAT5 Ethernet	ISDN, T1, DDS (Fused)	Dial-up Modem/Fax (Fused)
12-Port Flush-mount Unit 110 Block to RJ45 (Not Shown)	All Pins	EPCH12-C5	—	—
	Center 4 Pins (8-Pin Version Available)	—	EPCH12-RJ45-B ^②	EPCH12-RJ45-G ^②
24-Port Flush-mount Unit 110 Block to RJ45	All Pins	EPCH24-C5	—	—
48-Port Stand-off Unit 110 Block to RJ45 (Not Shown)	All Pins	EPCH48-C5	—	—

^① See Ordering Guidelines below.

^② Not UL listed.

Note: Special configurations available.



Note: All specifications and dimensions are subject to change without notice.

Ordering Guidelines

Note: Do not include any dashes, brackets or hyphens in the catalog numbers when ordering.

Example: EPCH12-RJ45-B = EPCH12RJ45B.



MADE IN THE USA



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