

**ISO-ETH-P**  
Industrial 10M/100M Ethernet  
Surge Protector

[SERIALCOMM.COM](http://SERIALCOMM.COM)

Datasheet Revision 2.5



**GENERAL FEATURES:**

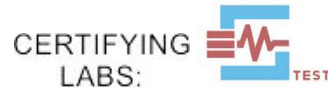
- Three stage protection of both lines of the RS-485 port
- Passive: no need for external power
- Plug-and-Play (Device is hot-pluggable)
- RJ45 connections for easy installation
- Clamping voltage at 6.8 volts
- 600W of surge protection
- 5-year replacement manufacturer's warranty
- CE, FCC, RoHS and REACH certified

**DESCRIPTION:**

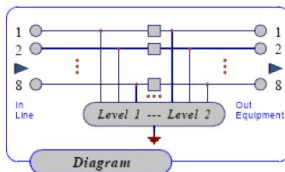
The SerialComm ISO-ETH-P is an industrial-grade (wide temperature range) bi-directional passive Ethernet surge arrester. It can protect any standard 10Base-T/100Base-TX Ethernet port from voltage peaks, and spikes caused by lightning and other power surges. The unit is passive; therefore, no external power or flow control is required. The ISO-ETH-P has a RJ45 on one Ethernet side and an another RJ45 on the other Ethernet side.

The ISO-ETH-P is designed with top quality high response surge arresters., The low capacitance protection provides a clamping voltage with low loss against the high-speed signal. The ISO-ETH-P is designed to protect data communication lines in local and wide area networks up to 100Base-T transmission speeds.

**CERTIFICATIONS:**

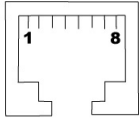


**FUNCTIONAL DIAGRAM:**



**PINOUT CONFIGURATION**

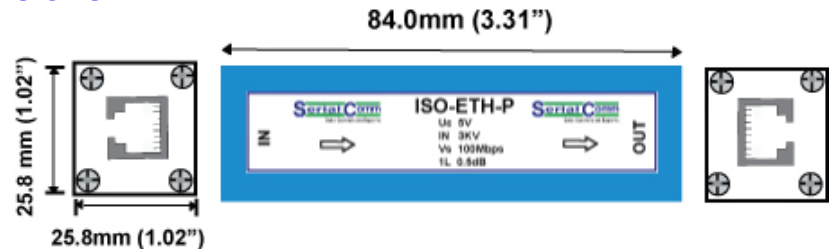
RJ-45 FEMALE CONNECTORS PROTECTED LINES (1,2,3,6)								
<b>Signal</b>	TX+	TX-	RX+	N/C	N/C	RX-	N/C	N/C
<b>Pin #</b>	1	2	3	4	5	6	7	8
<b>Function</b>	TX+	TX-	RX+	N/C	N/C	RX-	N/C	N/C



**SPECIFICATIONS:**

COMMUNICATION	
<b>STANDARDS:</b>	10Base-T/100Base-TX Standard, IEC61000-4-5 and ITU-TK20&K21 Standards
<b>BAUD RATES:</b>	Up to 100 mbps
<b>CONNECTOR TYPES:</b>	RJ45 Female Connectors
ELECTRICAL	
<b>POWER SOURCE:</b>	Passive Device: No Power Needed.
<b>WORKING VOLTAGE:</b>	0 Volts to 5 Volts
<b>VOLTAGE CLAMP:</b>	6.8 Volts
<b>VOLTAGE LIMIT:</b>	40 Volts
<b>INSERT CONSUMPTION:</b>	< 0.5 db
<b>DELAY TIME:</b>	< 1 ns
MECHANICAL	
<b>HOUSING:</b>	Heavy Duty Steel Casing
<b>WEIGHT:</b>	0.35oz (10 grams)
<b>DIMENSIONS:</b>	3.31" X 1.02" X 1.02" (84.0 mm X 25.8 mm X 25.8 mm)
ENVIRONMENTAL	
<b>OPERATING TEMP:</b>	-40° F to 185° F (-40°C to 85° C)
<b>STORAGE TEMP:</b>	-40° F to 185° F (-40°C to 85° C)
<b>OPERATING HUMIDITY:</b>	5% To 95% - No Condensation
QUALITY	
<b>PRODUCT SAFETY:</b>	CE, FCC RoHS and REACH Conformance Certified
<b>QUALITY MANAGEMENT</b>	Manufactured and Distributed to ISO 9001:2015 QMS
<b>RELIABILITY:</b>	Low Failure Rate – 99+% Reliability Since Inception
<b>WARRANTY:</b>	5 Year Replacement Warranty

**DIMENSIONS:**



APPLICATIONS:

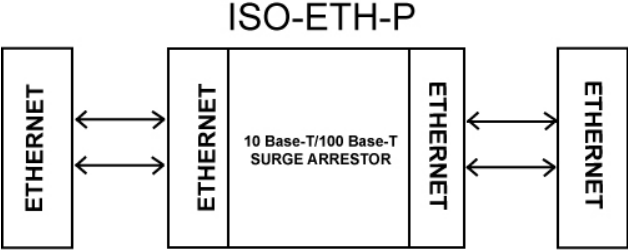


FIGURE 1: 600W SURGE SUPPRESSION CONNECTION DIAGRAM