

ISO-485-P

Industrial RS-485 Surge Protector 2-Wire
Datasheet Revision 2.1



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)
- Terminal connections for easy installation
- Clamping voltage at 6.8 volts
- 600W of surge protection
- 5 year manufacturer's warranty
- RoHS, CE, and FCC certified

DESCRIPTION:

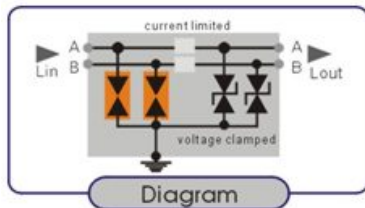
The SerialComm ISO-485-P is an industrial-grade (wide temperature range) bi-directional passive RS-485 surge protector. It can protect any standard half duplex RS-485 port from voltage peaks, and spikes caused by lightning and other power surges. The ISO-485-P protects the 2 lines: 485+ and 485-. The unit is passive, therefore, no external power or flow control is required. The ISO-485-P has a 3-wire terminal block on one RS-485 side and a 2-wire terminal block on the other RS-485 side.

The ISO-485-P provides three stages of protection for maximum safety. The first stage is a gas discharge tube. The second stage is a series of protection resistors. The third stage is 600W Transient Voltage Suppressor (TVS). All three stages of protection are provided for each of the RS-485 lines. When the ISO-485-P is placed close to the RS-485 device it is protecting, it will suppress any voltage levels above 6.8 volts without affecting the normal operation of the data transmission. When installing the ISO-485-P it is very important that the ground screw is connected to earth ground with a minimum of 12 AWG copper wire.

CERTIFICATIONS:



FUNCTIONAL DIAGRAM:



PINOUT CONFIGURATION:

ISO-485-P INPUT SIDE

SIGNAL	A+	B-	GND
PIN #	A	B	G
FUNCTION	A+	B-	GND

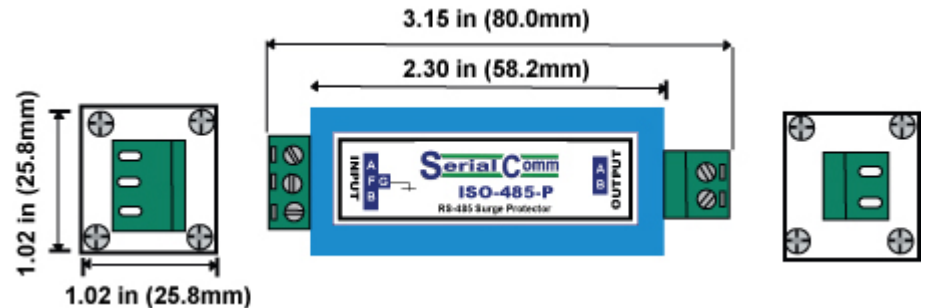
ISO-485-P OUTPUT SIDE

SIGNAL	A+	B-
PIN #	A	B
FUNCTION	A+	B-

SPECIFICATIONS:

COMMUNICATION	
STANDARDS:	2-wire RS-485 Standard
BAUD RATES:	From 300 Baud To 1 Mbps
CONNECTOR TYPES:	RS-485 Side: 3-wire Terminal Block and Other RS-485 Side: 2-wire Terminal Block
ELECTRICAL	
POWER SOURCE:	Passive Device: No Power Needed.
WORKING VOLTAGE:	0 Volts to 5 Volts
VOLTAGE CLAMP:	6.8V
INSERT CONSUMPTION:	< 0.5 db
DELAY TIME:	< 1 ns
MECHANICAL	
HOUSING:	Heavy Duty Steel Casing
WEIGHT:	0.35oz (10 grams)
DIMENSIONS:	3.15" X 1.02" X 1.02" (80.0 mm X 25.8 mm X 25.8 mm)
ENVIRONMENTAL	
OPERATING TEMP:	-40° F to 185° F (-40°C to 85° C)
OPERATING HUMIDITY:	5% To 95% - No Condensation
QUALITY	
PRODUCT SAFETY:	CE, FCC and RoHS Conformance Certified
RELIABILITY:	Low Failure Rate - 99.9% Reliability Since Inception
WARRANTY:	5 Year Replacement Warranty

DIMENSIONS:



APPLICATIONS:

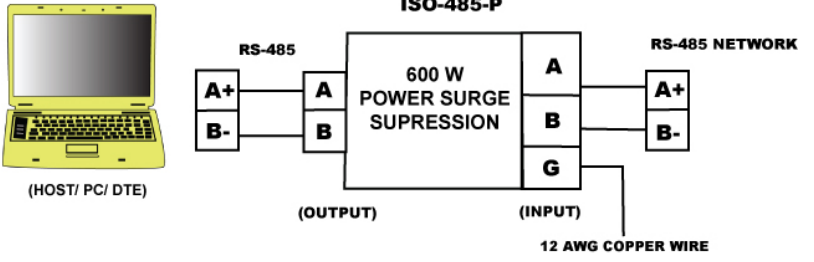


FIGURE 1: 600W SURGE SUPPRESSION CONNECTION DIAGRAM