SP-RS485-12V-O
Weather Resistant Surge Protector for RS485 Control and 12VDC Power Lines

The SP-RS485-12V-O Weather Resistant Surge Protector is for protecting RS485 control equipment powered by 12VDC power supplies from the effects of electrostatic discharge, faulty wiring and lightning.   The SP-RS485-12V-O can be used with an ENVIROMUX RS485 sensor connected with CAT5 cable or contact sensors running on 22 AWG 2-wire sensor cables.
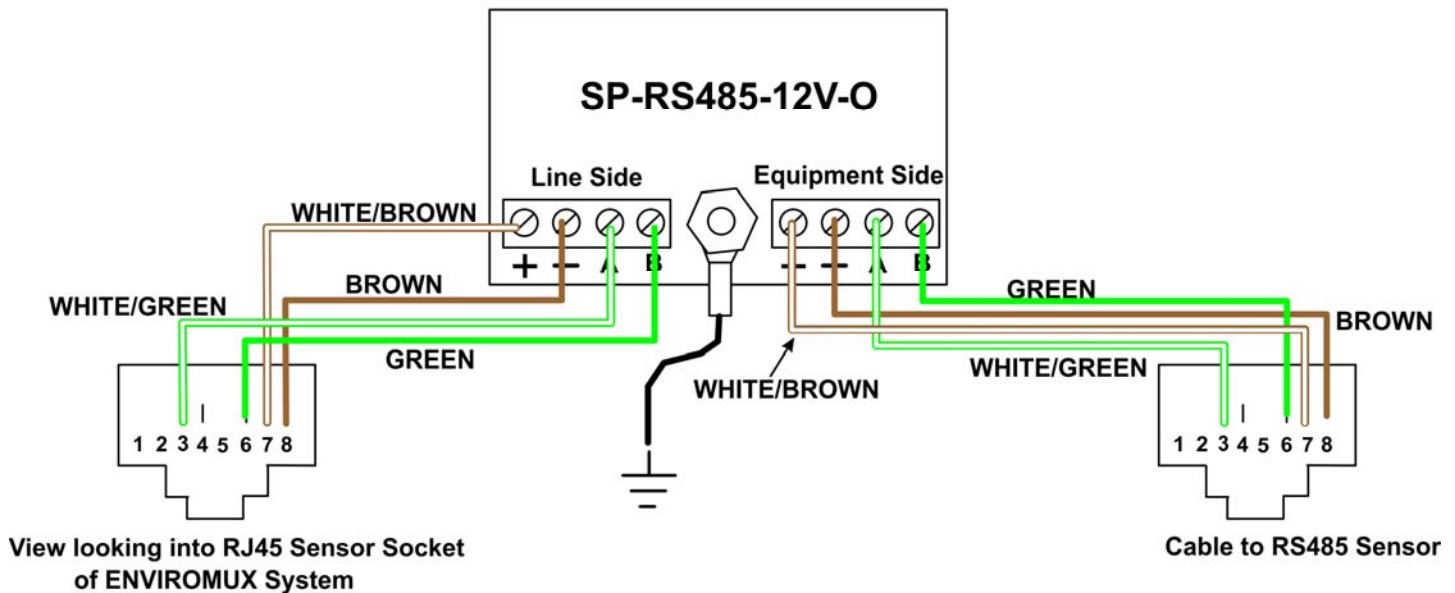
Features

- Ideal for applications such as video surveillance cameras and access control.
- RS485 protection
  - Stage 1 clamping voltage: ±90V
  - Stage 2 resistance: 3.3 Ohms
  - Stage 3 clamping voltage: ±7.5V
- 12VDC power lines protection
  - Stage 1 clamping voltage: ±90V
  - Stage 2 current rating: 3A
  - Stage 3: 12V TVS (transient voltage suppression) diode
- Screw terminal pairs for RS485 and 12VDC power lines protection.
- Will also protect two single ended data, analog or control lines.
- Impact and weather resistant enclosure with locking hinged cover.

Installation

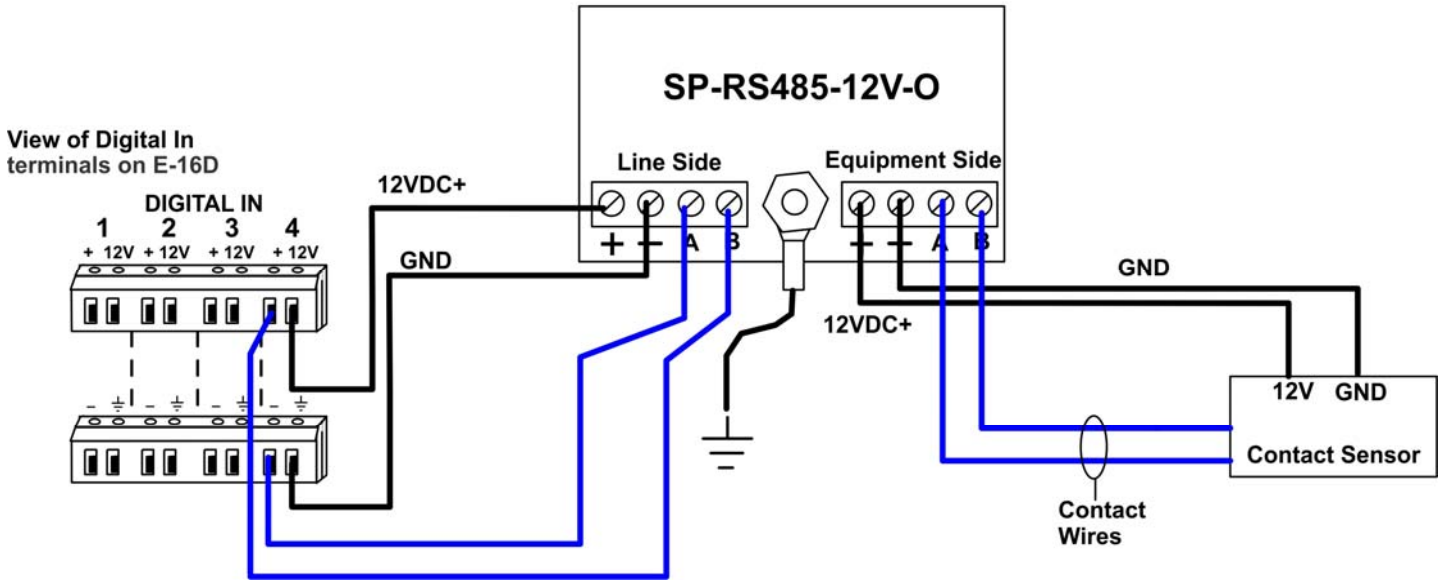**The SP-RS485-12V-O must be grounded for proper operation!**

When using an SP-RS485-12V-O Surge Protector to provide protection from a surge hitting an ENVIROMUX RS485 sensor, it should be wired according to the diagram below.

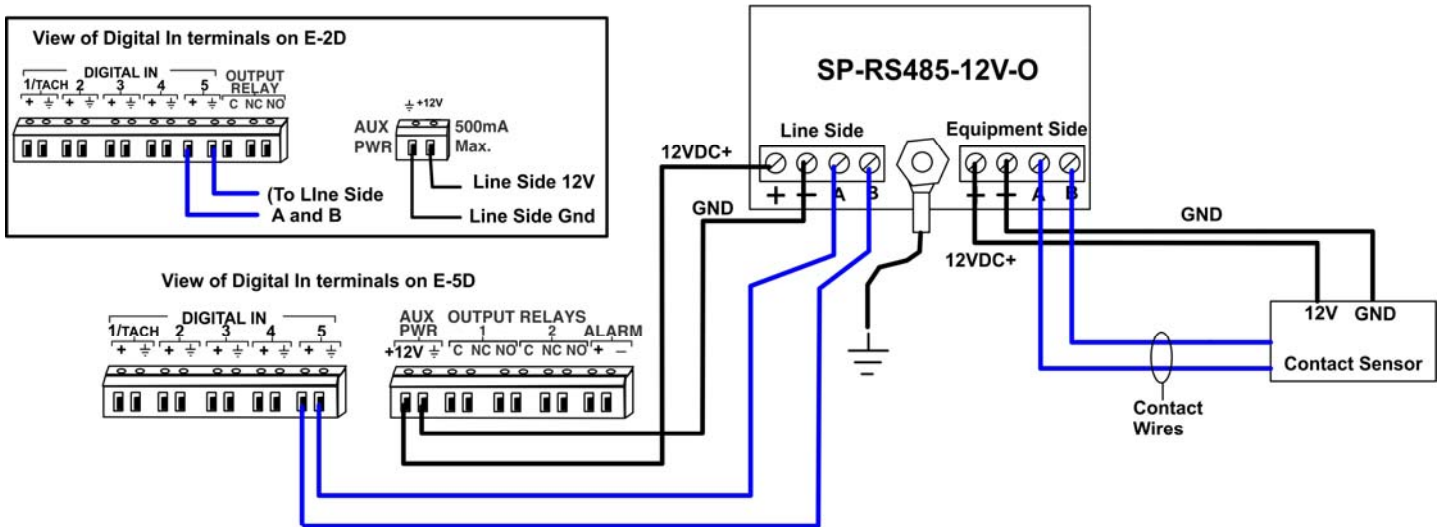Example #1- Wiring to an RJ45 Sensor on E-2D/5D/16D

When using an SP-RS485-12V-O Surge Protector to provide protection at a contact sensor, it should be wired according to one of the diagrams below. If the contact sensor is wired to an RJ45 Sensor socket, simply connect pins 7 and 8 from the RJ45 sensor socket to the "+" and "-" terminals of the SP-RS485-12V-O Surge Protector.
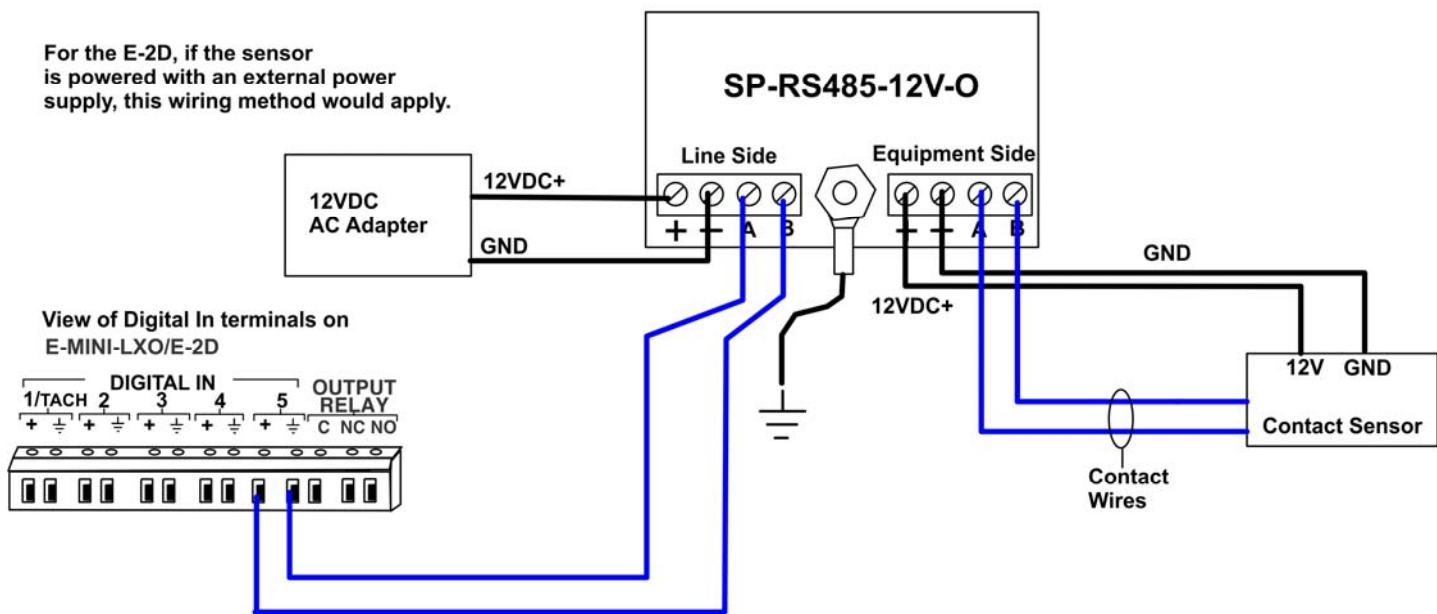
Example #2- Wiring to a Contact Sensor on E-16D

Example #3- Wiring to a Contact Sensor on E-5D/-2D

Example #4- Wiring to a Contact Sensor on E-MINI-LXO or E-2D

For the E-2D, if the sensor is powered with an external power supply, this wiring method would apply.

RS485 Sensor Wiring

The RJ45 Sensor sockets on an ENVIROMUX Enterprise Environment Monitoring System are intended for use with contact sensors and ENVIROMUX RS485 sensors. The RS485 sensors are connected using CAT5 cables wired according to the chart below.

RJ45 Sensor Socket Pinout (E-2D/5D/16D)

Pin #	Pin Name	Wire Color
1	GND	White/Orange
2	SENSE	Orange
3	RS485 +	White/Green
4	+5 VDC	Blue
5	TAMPER SWITCH	White/Blue
6	RS485 -	Green
7	+12 VDC	White/Brown
8	GND	Brown

Warranty Information

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at http://www.networktechinc.com for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

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CHANGES

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