+ Additional Information

Learn more about surge suppression & isolation at:
www.advantech-bb.com

- "Isolation: Your Best Investment for Reliability"
- "Dataline Isolation Theory"
- "Dataline Surge Protection"

+ Recommended Accessories

Copper Grounding Strap
CU15B
(sold by the foot, 12" increments)

B+B SmartWorx
Powered by ADVANTECH

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+ QUICK START GUIDE

Model HESP4DR

Data Line Surge Suppressor - DIN Rail Mount

Before you begin, be sure you have the following:

+ HESP4DR Surge Suppressor
+ Copper Grounding Strap (optional, sold separately)

B+B SmartWorx
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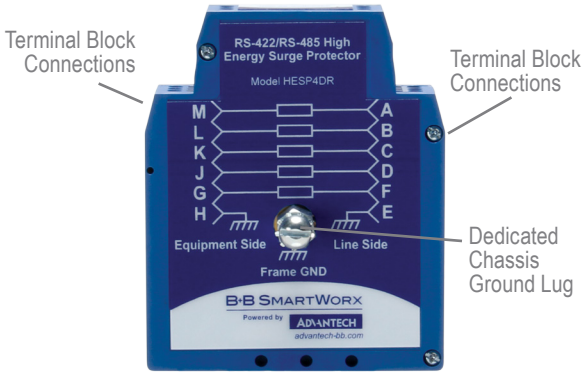
Fast and easy on the web: ***www.advantech-bb.com***

Product Overview

3-Stage Protection on Data Lines:
1. Gas discharge tube
2. Series resistor
3. Transient voltage suppressor



HESP4DR - SPECIFICATIONS	
Clamping Voltage - Stage 1	72 VDC min., 108VDC max.
Series Resistance - Stage 2	2.7 Ohms
Clamping Voltage - Stage 3	6.45 V min., 7.14 V max.
Clamping Time	Less than $5x10^{-9}$ Seconds
Data Line Connectors	Terminal blocks
Temperature	-40 to 80 °C (operating)
MTBF	862813 hours

1 Getting Started

Model HESP4DR is designed to help protect against lightning strikes, power surges, and other types of voltage disturbances to components on a DIN rail.

Five RS-422/485 signals on terminal blocks are supported with a clamping voltage of approximately 6.8 Volts.

The HESP4DR offers three stages of protection starting with a gas discharge tube, followed by a series resistor and, finally, a Transient Voltage Suppressor (TVS).

2 Earth Ground Connection

In order for a surge protector to work properly, it is important to have a good connection to earth ground. The HESP4DR has a #10 grounding screw, which provides a solid ground connection for the user.

To ensure the best protection of your equipment, some simple connection guidelines should be followed:

1. The HESP4DR should be located as close as possible to the equipment being protected.
2. A good ground connection must be made between the HESP4DR and earth ground. This can be done with the #10 grounding screw.
3. The earth ground connection should be kept as short as possible for best performance. As a recommendation a minimum of 10 gauge copper wire of no more than 3 feet (0.9 m) should be used. If it is not possible to achieve the short distance, a braided cable made specifically for grounding purposes should be used.
4. The chassis ground of the equipment should be connected to the building's 3-prong plug ground.