

# Three-stage DIN Rail Surge Protector

BB-HESP4DR

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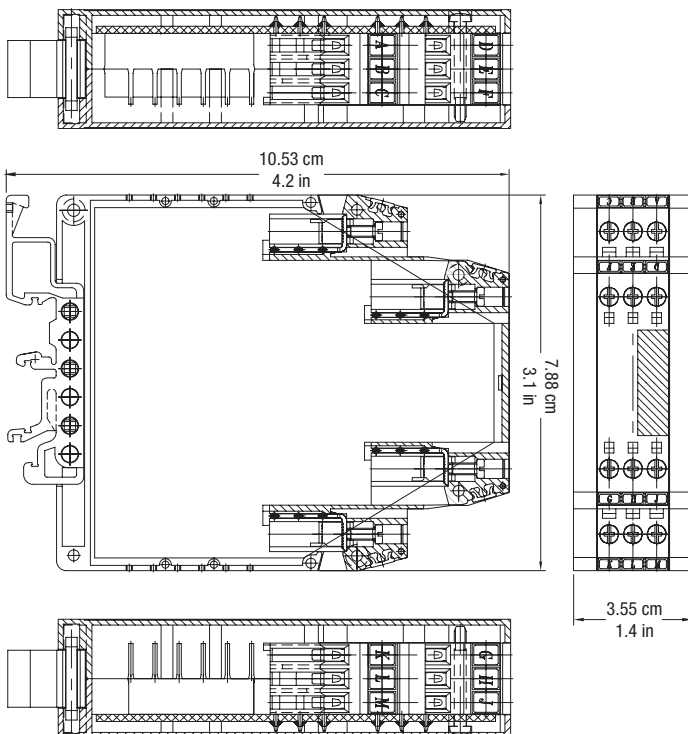
## PRODUCT FEATURES

- Three stages of protection on every data line
  - 1) Gas discharge tube
  - 2) Series resistor
  - 3) Transient voltage suppressor
- Protected signal ground connection
- Rugged terminal block connections
- Dedicated chassis ground lug
- Wide operating temperature

Model BB-HESP4DR protects against lightning strikes, power surges, and other types of voltage disturbances with three stages of protection for each line: a gas discharge tube followed by a series resistor and finally a Transient Voltage Suppressor (TVS). Five RS-422/485 signals on terminal blocks are supported with a clamping voltage of 6.8 Volts.

The surge protector is housed in a rugged DIN rail mount case with a protected signal ground connection and dedicated chassis ground lug. In order to work properly, it is important to have a good connection between the #10 grounding screw and a solid earth ground.

## MECHANICAL DIAGRAM



## ORDERING INFORMATION

MODEL NUMBER	INTERFACE	LINES PROTECTED	MOUNTING
BB-HESP4DR	RS-422/485	(5) RS-422/485	DIN Rail Mount

## SPECIFICATIONS

SERIAL TECHNOLOGY	
Connectors, line	5-position terminal blocks
Connectors, equipment	5-position terminal blocks
SURGE SUPPRESSION	
Clamping Voltage - stage 1	72 VDC, minimum 108 VDC, maximum
Series Resistance - stage 2	2.7 Ohms
Clamping Voltage - stage 3	6.45 VDC, minimum 7.14 VDC, maximum
Clamping Time	Less than $5 \times 10^{-9}$ seconds
MECHANICAL	
Dimensions	3.55 x 7.88 x 10.53 cm
Installation	DIN rail mount
Weight	0.114 kg
MTBF	862813 hours
MTBF Calc. Method	MIL 217F, Parts Count Reliability Prediction Method
ENVIRONMENTAL	
Operating Temperature	-40 to +80 °C
Storage Temperature	-40 to +85 °C
Operating Humidity	0 to 95%, non-condensing
APPROVALS / DIRECTIVES / STANDARDS	
FCC	
CE - Directives	2014/30/EU Electromagnetic Compatibility Directive 2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances Directive 2012/19/EU Waste electrical and electronic equipment (WEEE)
CE - Standards	EMC: EN 55032 - Class B Electromagnetic compatibility of multimedia equipment – Emission requirements EN 55024 - Information Technology Equipment – Immunity Characteristics – Limits and methods of measurement

All product specifications are subject to change without notice.  
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