

# RS-232 4-Channel Optical Isolator

Model BB-9POP4

ADVANTECH

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## PRODUCT FEATURES

- Protects RS-232 equipment, up to 4 channels
- 2.5kV isolation
- 15kV ESD protection
- Data rate: 230.4 kbps
- Quick in-line installation
- Ideal for laptops, lower power serial ports
- Power supply required, sold separately

Model BB-9POP4 isolates and protects RS-232 equipment from lightning surges, accidental high voltage shorts and ground loops. RS-232 data signals TD, RD, RTS, and CTS support up to 230.4 kbps. Isolation circuits are 2.5 kV rated and protects valuable equipment while maintaining maximum uptime.

The isolator uses DB9 male and DB9 female connectors. The female connector is wired as a DCE and should be connected to a DTE port. The male connector is a DTE and should be connected to a DCE port. If you are connecting a DTE to a DTE or a DCE to a DCE, you will need a null modem adapter.

Each side of the isolator receives power from a single 12 VDC power supply to maintain isolation. This powering configuration allows the device to be used in a system with only one power supply, regardless of the power provided by the RS-232 ports.

A recommended, tested and certified power supply is available from Advantech and sold separately. (Note: using any other power supply may bypass or degrade the isolation barrier.)

## ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BB-9POP4	RS-232 4-Channel Optical Isolator

## ACCESSORIES – sold separately

BB-SMI6B-12V-P230C1 – Power Supply, 12 VDC, 6 W, 2.5mm Plug, International AC Input, International AC Blades

BB-9PAMF6 – Serial Cable, DB9M/DB9F, 1.8 m (6 ft)

BB-232NM9MF10– Null Modem Cable, DB9M/DB9F, 3.1 m (10 ft)

BB-232NM9MF6 - Null Modem Cable, DB9M/DB9F, 1.8 m (6 ft)

## SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, RTS, CTS, GND
Data Rate	230.4 kbps
Isolation	2.5 kV
ESD	15 kV Air Discharge, 8 kV Contact
Connectors	DB9 female (DCE) DB9 male (DTE)
POWER	
Source	External required (sold separately)
Power Connector	2.5 mm jack
Input Voltage	12 VDC
Power Consumption	731 mW
MECHANICAL	
Dimensions	10.4 x 4.3 x 2.0 cm (4.1 x 1.7 x 0.86 in)
Enclosure	IP30, plastic
Weight	54.4 g (0.12 lb)
MEANTIME BETWEEN FAILURE (MTBF)	
MTBF	262084 hours
Calculation Method	MIL 217F Parts Count Reliability

ENVIRONMENTAL	
Operating Temperature	0 to +70 °C
Storage Temperature	-40 to +85 °C
Operating Humidity	0 to 95% Non-condensing
APPROVALS / CERTIFICATIONS	
FCC, CE	
CE - Directives	2014/30/EU Electromagnetic Compatibility Directive 2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	<b>EMC:</b> EN 55032:2015 Class B Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN 55024:2010 Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
Standards - other	EN 61000-6-1 - Generic Immunity Standard for Residential, Commercial and Light-industrial Environments

All product specifications are subject to change without notice.  
BB-9POP4\_2220ds

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