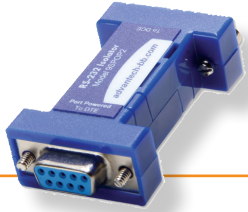


# 2.5 kV RS-232 Optical Isolator

## 9SP0P2



### PRODUCT FEATURES

- 2,500V, 2-way optical isolation
- RS-232 on DB9 male and female connectors
- Port-powered on both sides, no external power supply required

Model 9SP0P2 is a port powered two-channel isolator with a 2,500 Volt protection level. It optically isolates both the RS-232 Transmit and Receive data lines and RS-232 equipment from lightning surges, accidental high voltage shorts, and ground loops. RS-232 data signals TD and RD are supported at up to 115.2 kbps.

### ORDERING INFORMATION

MODEL NUMBER	CHANNELS PROTECTED	DTE CONNECTOR	DCE CONNECTOR	ISOLATION
9SP0P2	2	DB9 Female	DB9 Male	2,500 V

### ACCESSORIES

- 9PAMF6 - DB9 Male To DB9 Female, 1.8 m (6 ft.)
- MMNM9 - Null Modem Adapter – DB9 Male / DB9 Male
- 232HESP - RS-232 Surge Protector

### SPECIFICATIONS

SERIAL TECHNOLOGY	
Data Rate	9600 baud rate
<b>RS-232</b>	
Connector	DB9 female (DTE)
Connector	DB9 male (DCE)
Signals	TD, RD
Transmission Mode	Asynchronous, half or full duplex, point-to-point
POWER	
Source	Port Powered from both sides. DTE side - DTR & RTS lines. DCE side - DCD, DSR & CTS lines.
Weight	0.08 lb (36.3 g)
ISOLATION	
Volts/Duration	2,500 Volts RMS isolation for 1 minute
MECHANICAL	
Dimensions	6.1 x 3.3 x 1.7 cm (2.4 x 1.3 x 0.66 in)
MTBF	674717
MTBF Calc. Method	Parts Count Reliability Prediction
ENVIRONMENTAL	
Operating Temperature	0 to +70 °C
Storage Temperature	-55° to 125°C
Operating Humidity	0 to 95% Non-Condensing
MTBF	674717.4
MTBF Calc. Method	Parts Count Reliability Protection
APPROVALS / CERTIFICATIONS - 9SP0P2	
FCC Part 15, CISPR, EN 55022: 2010 + AC:2011 Class A Emissions	
CE	
EN 61000-6-1: 2007 Generic Standards for Residential, Commercial and Light-Industrial Environments	
EN 61000-4-2: 2009 Electro-Static Discharge (ESD)	
EN 61000-4-3: 2006 +A1 +A2 +IS1 Radiated Field Immunity (RFI)	
EN 61000-4-4: 2012 Electrical Fast Transients-Burst Immunity (EFT)	
EN 61000-4-6: 2009 Conducted Immunity	
Download complete Declaration of Conformity at <a href="http://www.bb-elec.com">www.bb-elec.com</a>	

### Surge Protection Standards

IEC 1000-4-5: 1995 “Surge Immunity Test” and IEEE C62.41-1991 “IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits” are the recognized standards for surge protection. Advantech B+B SmartWorx’ heavy duty surge protectors have been tested at 6 kV to meet these two specifications.

**Learn more about surge suppression & isolation**  
[www.bb-elec.com/TechLibrary](http://www.bb-elec.com/TechLibrary)

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

### MECHANICAL DIAGRAM

