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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Isolated Serial Converter

Model 485OI9TB

B+B SMARTWORX

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## PRODUCT FEATURES

- 1,500 Volts optical isolation
- Converts RS-232 to RS-422/485
- 4-wire, full-duplex RS-485
- 2-wire, half-duplex RS-485

Model 485OI9TB, isolated converter, converts unbalanced, full duplex RS-232 signals to balanced full-duplex (4-wire) RS-422/485 or half-duplex (2-wire) RS-485 signals.

The converter provides 1,500 Volts RMS optical isolation for data lines and ground (and connected devices) between the RS-232 and RS-422/485 signals. RS-232 port has a female DB9 connector. RS-422/485 port has a 6-position terminal block.

The RS-232 side of the converter draws power from the handshake lines (DTR, RTS). At least one handshake line must be asserted (raised high) to power the RS-232 side. The RS-422/485 side must be powered by an external 12 VDC power supply (sold separately).

## SPECIFICATIONS

SERIAL TECHNOLOGY	
Data Rate	9600 bps
RS-232	
Connector	DB9 Female (DCE)
Signals	TD, RD, GND
RS-422/485	
Connector	Terminal block
RS-485, 2-Wire	Data A (-), Data B (+), GND
RS-422/485, 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), GND
ISOLATION	
Lines Protected	Data lines
Method	Optical
Rating	1,500 V
POWER	
<b>Note: Requires Two (2) Power Sources</b>	
RS-232	
Source	Port-powered from DTR and RTS handshake lines
RS-422/485	
Connector	Terminal block
Voltage	10-14 VDC
Consumption	0.9 W
Source	External
TERMINAL BLOCK	
Wire Size	26 to 16 AWG
Torque	2.0 lb fin

## ORDERING INFORMATION

MODEL NUMBER	RS-232 CONNECTOR	RS-422/485 CONNECTOR
485OI9TB	DB9 Female	Terminal Block

## ACCESSORIES

SMI6-12-V-ST - Power Supply, 12 VDC 6 Watt, Stripped and Tinned, International AC Input, International AC Blades

9PAMF6 - 6 ft. (1.8 m) RS-232 Serial Cable

MMNM9 - DB9 male to DB9 male Null Modem Adapter

## SPECIFICATIONS - continued

ENCLOSURE	
Material	Plastic
Dimensions	5.5 x 8.3 x 1.7 cm (2.2 x 3.3 x 0.7 in)
Mounting	Inline
ENVIRONMENTAL	
Operating Temperature	0 to +50 °C (+32 to +122 °F)
Storage Temperature	-40 to +85 °C (-40 to +185 °F)
Operating Humidity	0 to 95% non-condensing
MTBF	272581 hours
MTBF Calculation Method	MIL 217F Parts Count Reliability Prediction
APPROVALS / CERTIFICATIONS	
CE, FCC	
cULus, File Number: E222870	
2014/30/EU	Electromagnetic Compatibility Directive
2011/65/EU	Reduction of Hazardous Substances Directive (RoHS)
2012/19/EU	Waste Electrical and Electronic Equipment (WEEE)
EN 55032 (Class B)	Information Technology Equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 61000-6-1	Generic immunity standard for residential, commercial and light-industrial environments
EN 61000-4-2	ESD Immunity
EN 61000-4-3	Radiated Immunity
EN 61000-4-4	EFT/Burst Immunity
EN 61000-4-6	RF Conducted Immunity

All product specifications are subject to change without notice.  
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