Port Powered
RS-232/485 Converters

Models BB-485SD9R, BB-485SD9RJ, BB-485SD9TB

ADVANTECH

www.advantech.com

Model
BB-485SD9R

PRODUCT FEATURES

- Extend RS-232 data signals up to 1.2 km (4000 ft)
- Convert RS-232 TD and RD to RS-485 signals
- Automatic Send Data Control - no software drivers necessary
- Baud rates up to 115.2 kbps
- Powered from RS-232 handshake lines - no power supply required

These port-powered, two channel converters allow your computer to communicate longer distances by converting TD and RD RS-232 lines to RS-485 signals. RS-485 also provides multi-drop capability.

All converters feature Automatic Send Data Control which enables the driver when data is present on the RS-232 side. Control of the driver is automatic at speeds up to 115.2 kbps.

The unit is powered from the RS-232 data and handshake lines whether the lines are high or low. No handshake line change is necessary to control the data lines. The RS-485 driver is enabled with each bit of data. The RS-485 receiver is disabled when the driver is enabled and is enabled when the driver is disabled. Model BB-485SD9TB can be optionally powered by an external 12 VDC power supply.

These converters are suitable for field service, where a power supply would add clutter, or anywhere you need compact, easy-to-use, economically priced serial conversion.

ORDERING INFORMATION

MODEL NUMBER	RS-232 CONNECTOR	RS-485 CONNECTOR	OUTPUT	OPTIONAL POWER SUPPLY
BB-485SD9R	DB9 Female	DB9 Female	RS-485 2-wire	-
BB-485SD9RJ	DB9 Female	RJ11	RS-485 2-wire	-
BB-485SD9TB	DB9 Female	Terminal Block	RS-485 2-wire	✔

ACCESSORIES - SOLD SEPARATELY

BB-SMi6-12-V-ST - Power Supply, 12 VDC 6 Watt, Stripped and Tinned, International AC Input, International AC Blades

BB-9PAMF6 - DB9 Male to DB9 Female Adapter Cable, 1.8 m (6 ft)

Automatic Send Data Control Explained

As operating systems become more complex, it is increasingly difficult to control an RS-485 driver with standard software and the RTS line. This is especially true in Windows and multi-tasking operating systems. With Advantech B+B SmartWorx' Automatic Send Data Control circuit, driver control is in the converter hardware, so you do not have to work with software at all.

The circuit monitors data flow and enables the driver during transmission and automatically disables it when no data is being sent. There is no need to rework software or install new drivers. Most Advantech B+B RS-232 to RS-485 converters and RS-485 serial cards include Automatic Send Data Control.

Why use an "optional" power supply with a port-powered converter?

Simply put, all RS-232 ports are not created equal. Many laptop PC's, for example, deliberately reduce power to the RS-232 port to save the battery. And, if you are working at the distance limits of RS-422 or 485, you might need an extra boost. For the majority of applications though, the converter's port powering is sufficient to accomplish the task.

ADVANTECH

orders@advantech-bb.com
eSales@advantech-bb.com

Headquarters: 707 Dayton Rd, PO Box 1040 Ottawa, IL 61350 USA (815)433-5100 or **(800)346-3119**/Toll Free Fax (815)433-5104
European Office: Westlink Commercial Pk, Oranmore Co. Galway Ireland +353 91 792444 Fax +353 91 792445

Port Powered
RS-232/485 Converters
Models BB-485SD9R, BB-485SD9RJ, BB-485SD9TB

Model
BB-485SD9TB

SPECIFICATIONS

SERIAL TECHNOLOGY	
Data Rate	115.2 kbps, maximum
RS-232	
Connector	BB-485SD9R: DB9 female BB-485SD9RJ: DB9 female BB-485SD9TB: DB9 female
RS-485	
	BB-485SD9R: DB9 female BB-485SD9RJ: RJ11 BB-485SD9TB: Terminal board
Biasing Resistors	4.7k Ohms

POWER	
Source	Port-powering: from RS-232 handshake lines. External power option, 12-16 VDC (BB-485SD9TB only)
Power Connector	Terminal block (BB-485SD9TB only)
Input Voltage	12 VDC (BB-485SD9TB only)
Power Consumption	40mA, maximum

MECHANICAL	
Dimensions	BB-485SD9R: 6.0 x 3.2 x 1.6 cm (2.4 x 1.3 x 0.6 in) BB-485SD9RJ: 7.3 x 3.2 x 1.6 cm (2.9 x 1.3 x 0.6 in) BB-485SD9TB: 8.7 x 3.2 x 1.6 cm (3.4 x 1.3 x 0.6 in)
Enclosure	Plastic
Weight	81.6 gm (0.18 lb)
MTBF	BB-485SD9R: 986473 hours BB-485SD9RJ: 897656 hours BB-485SD9TB: 968410 hours
MTBF Calc. Method	MIL 217F Parts Count Reliability Prediction

WIRING INFORMATION	
Refer to Quick Start Guide for wiring information, including terminal and pin identification. Available on website.	

ENVIRONMENTAL	
Operating Temperature	0 to +70 °C (+32 to +158 °F)
Storage Temperature	-40 to +85 °C (-40 to +185 °F)
Operating Humidity	0 to 95%, non-condensing

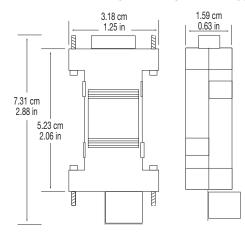| REGULATORY	
FCC Part 15, CISPR, CE	
CE - Directives	2014/30/EU - Electromagnetic Compatibility 2011/65/EU - Reduction of Hazardous Substances (RoHS) 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	EN 55032 Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement EN 61000-6-3 + A1 - Generic Emission Standard for Residential, Commercial and Light-industrial Environments (Class B) EN 61000-6-1 - Generic Immunity Standard for Residential, Commercial and Light-industrial Environments

MECHANICAL DIAGRAM - MODEL BB-485SD9R

MECHANICAL DIAGRAM - MODEL BB-485SD9TB

Model 485SD9TB

MECHANICAL DIAGRAM - MODEL BB-485SD9RJ

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Interface Modules *category:*

Click to view products by Advantech *manufacturer:*

Other Similar products are found below :

CYG2218 FAB118 8500-003 IFD8520 FAB100-RC 20-101-1338 cPCI-3544 CYG2217 CYG2320 422CON ATX6022/14GP7 ATX6022/8 AX93221-24/48 cPCI-3538 USB30-MIPI-TESTER-OV10640 MTAC-LORA-H-915 OPT8AP-AE 60006-016 96RMKVM-19V1C-A 60016-011 60016-014 60006-008 60016-015 60011-075 LPCIe-3488A HPCI-14S12U cBP-3208 cBP-3062A FAB205-6P5 FAB114 ATX6022/6 60016-012 96RMKVM-17V1C-A BB-QCLDVDSV2-KIT MOS-1120Y-0201E 96RMLCD-17V1-A 96RMKVM-17V8C-A 60004-005 60016-017 60006-019 60006-009 60004-002C 60016-035 60016-034 60016-031 60016-030 60016-026 60016-025 60016-024 60016-022