

# Optically Isolated RS-422/485 Repeater

Model BB-485OP

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## PRODUCT FEATURES

- Device and data 2 kV optical isolation and 1.2 km (4000 ft) extension
- Add up to 32 nodes to RS-485 network
- Inline installation
- External 12VDC power source required (included)
- Modbus support
- CE, FCC, UL Recognized

Model BB-485OP is an optically isolated RS-422/485 signal repeater. In addition to 2KV isolation on the data lines, it can be used to extend RS-422/485 circuits an additional 1.2 km (4000 ft), thereby doubling the range. Terminal blocks for RS-422, RS-485 2 or 4-wire Another benefit is the ability to add another 32 nodes to an RS-485 network and join 2-wire and 4-wire systems.

The compact design fits almost anywhere. Terminal blocks allow easy installation. Wiring schematic on the label eliminates guesswork. A 12 VDC power supply is required, and included, with blades for USA, EU, UK, AU, UP & CN.

## ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BB-485OP	RS-422/485 Optically Isolated Repeater

## ACCESSORIES

**BB-SMI6-12V-ST** - Level VI Power Supply - 12VDC, 500mA, stripped & tinned leads, international blade kit. *One (1) included with repeater.*

## SPECIFICATIONS

SERIAL PROTOCOLS	
	RS-422
	RS-485 2-wire
	RS-485 4-wire
ISOLATION	
Lines Protected	Data lines
Method	Optical
Rating	2000 V
SURGE SUPPRESSION	
Lines Protected	Data lines
Method	TVS
Rating	6.5V bi-directional 600W peak power dissipation
INDUSTRIAL BUS	
	Modbus ASCII / RTU
POWER	
Connector	Terminal block
Voltage	10 to 14 VDC
Power Consumption	1.0 W
Source	External 12 VDC source, required. <i>One wall transformer power supply is included.</i>
POWER SUPPLY	
Input Voltage	96 - 264 VAC
Input Connections	AC blades for US, EU, UK, AU, CN & JP
Output Connections	Stripped & tinned leads
Output Current	500 mA
Output Power	6W
Efficiency Level	VI
Output Voltage	12 VDC

## SPECIFICATIONS - continued

TERMINAL BLOCKS	
Wire Size	22 to 14 AWG
Torque	0.5 Nm
LED INDICATORS	
2 x Data (Red)	Flashes when data received
ENCLOSURE	
Material	Plastic
IP Rating	30
Dimensions	9.7 x 6.1 x 2.5 cm (3.8 x 2.4 x 1.0 in)
Mounting	In-line
ENVIRONMENTAL	
Operating Temperature	0 to +40 °C (+32 to +104 °F)
Operating Humidity	0 to 95%, non-condensing
MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	453103 hours
MTBF Calculation Method	Parts Count Reliability Prediction
AGENCY APPROVALS	
CE, FCC, cULus Recognized, File E222870	
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	EN55022 (Class B) - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement EN 60950-1: +A1 +A11 +A12 +A2 - Information technology equipment - Safety - Part 1 General Requirements

All product specifications are subject to change without notice.  
BB-485OP\_1720ds

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