

Optically Isolated RS-422/485 Repeater

Model 485OP

B+B SMARTWORX

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PRODUCT FEATURES

- 2 kV optical isolation protection
- Add up to 32 nodes to RS-485 network
- RS-422 2-wire, RS-485 2 or 4-wire
- Modbus support
- UL Recognized

Model 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 (4,000 ft.), thereby doubling the range. An added benefit is the ability to add another 32 nodes to an RS-485 network and join 2 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 included with blades for US, EU, UK, AU, UP & CN.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
485OP	RS-422/485 Optic Isolated Repeater

ACCESSORIES

SMI6-12V-ST - Level VI Power Supply - 12VDC, 500mA, stripped & tinned, international blade kit.

SPECIFICATIONS

SERIAL PROTOCOLS	
	RS-422 4-wire
	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	Included wall transformer or other 12 VDC source
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 55 °C (32 to 131 °F)
Operating Humidity	0 to 95% non-condensing
MTBF	453103 hours
MTBF Calculation Method	Parts Count Reliability Prediction
AGENCY APPROVALS	
	CE, FCC
	cULus Recognized, File E222870
2004/108/EC	Electromagnetic Compatibility Directive
2011/65/8EU	Reduction of Hazardous Substances Directive
EN55022: +AC	Information technology equipment - Class B RF Emissions
EN55024	Information technology equipment - Immunity (Light-Industrial Environments)
EN61000-4-2	ESD Immunity
EN61000-4-3: +A2	Radiated Immunity
EN61000-4-4	EFT/Burst Immunity
EN61000-4-6	RF Conducted Immunity

All product specifications are subject to change without notice.

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