Optically Isolated RS-422/485 Repeaters
4850P, 4850PB

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 required.

PRODUCT FEATURES

- 2 KV isolation
- Add up to 32 nodes to RS-485 network
- RS-422 2-wire, RS-485 2 or 4-wire
- Modbus
- UL Recognized (#485OP)

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION	POWER SUPPLY
4850P	RS-422/485 Fiber Optic Isolated Repeater	USA (included)
4850PB	RS-422/485 Fiber Optic Isolated Repeater	EU or UK (sold separately)

ACCESSORIES

PS1EU-1000 - 220-240 VAC to 12 VDC power supply, jack, Euro CEE7/7 plug

PS1UK-1000 - 220-240 VAC to 12 VDC power supply, jack, UK BS-1363 plug

485HESP - RS-485 surge protector

485PS4 - 12VDC @ 500 mA, wall power supply, tinned stripped leads

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 10 to 14 VDC source
POWER SUPPLY	
Input Voltage	120 VAC (USA); 220-240 VAC (EU, UK)
Output Voltage	12 VDC
Output Connection	USA: Stripped and tinned leads EU: UK BS-1363 plug, jack UK: Euro CEE7/7 plug, jack
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 (MODEL# 4850P ONLY)	
	CE, FCC
	cULus Recognized, File E222870
	Declaration of Conformity available for download at www.bb-elec.com