# Optically Isolated RS-422/485 Repeaters

4850P



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# 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

Model 4850P 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.

## **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
Source POWER SUPPLY	Included wall transformer or other 12 VDC source
	Included wall transformer or other 12 VDC source 96 - 264 VAC
POWER SUPPLY	
POWER SUPPLY Input Voltage	96 - 264 VAC
POWER SUPPLY Input Voltage Input Connections	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP
POWER SUPPLY Input Voltage Input Connections Output Connections	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS Wire Size	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC 22 to 14 AWG
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS Wire Size Torque LED INDICATORS 2 x DATA (RED)	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC 22 to 14 AWG
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS Wire Size Torque LED INDICATORS	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC 22 to 14 AWG 0.5 Nm
POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS Wire Size Torque LED INDICATORS 2 x DATA (RED)	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC 22 to 14 AWG 0.5 Nm
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POWER SUPPLY Input Voltage Input Connections Output Connections Output Current Output Power Efficiency Level Ouput Voltage TERMINAL BLOCKS Wire Size Torque LED INDICATORS 2 x DATA (RED) ENCLOSURE Material	96 - 264 VAC AC blades for US, EU, UK, AU, CN & JP Sripped & tinned leads 500 mA 6W VI 12 VDC 22 to 14 AWG 0.5 Nm Flashes when data received

# **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION
4850P	RS-422/485 Fiber Optic Isolated Repeater

#### ACCESSORIES

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

## **SPECIFICATIONS**

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	Reductio nof Hazardous Substances Directive
EN55022: +AC	Information technology equipment - Class B RF Emissions
EN55024	Information technologyh 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. 4850P&4850PB\_2916ds

