



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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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