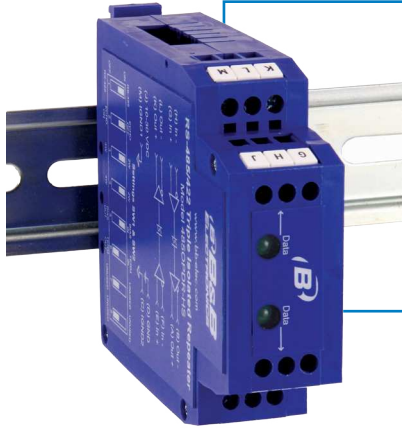


485OPDR-HS

High Speed, Triple Isolated, RS-422/485 Repeater



485OPDR-HS

The 485OPDR-HS is a high speed, optically isolated RS-422/485 repeater that supports data rates up to 1.5 Mbps, making it suitable for use in fieldbus systems such as Profibus.

Isolation

The 485OPDR-HS provides 2 kV digital Isolation with 8 kV air ESD protection and 600 W transient voltage suppression on the data lines.

Range Extension

The 485OPDR-HS can be used to extend the range of a network up to 4000 ft. (1.2 km), depending on data rates, and to add additional nodes. 2-Wire RS-485, 4-Wire RS-485 and RS-422 are supported. Data signals and the power inputs connect to built-in terminal blocks.

Enclosure

The repeater operates on externally sourced 10 to 30 VDC power. The enclosure has a DIN rail mount that is designed to fit easily on a standard 35mm rail.

The 485OPDR-HS is ideal for your critical industrial communications needs.

PRODUCT FEATURES

- 2 kV Isolation
- IEC Level 2, ± 4 kV contact ESD protection, IEC Level 3, ± 8 kV air ESD Protection
- 1.5 Mbps Data Rate
- -40 to 80°C Operating Temperature

SPECIFICATIONS

RS-422/485	
Connector	Terminal Block
SIGNALS	
	TDA(-), TDB(+), RDA(-), RDB(+), GND
	RS-422
	RS-485 2-Wire and 4-Wire
	Protected GND on Isolated Side
DATA RATE	
Bit-Wise Enabled	Up to 1.5 Mbps
Automatic Detection	
ISOLATION	
Method	Optical
Rating	2000 V
SURGE SUPPRESSION	
Method	TVS
Rating	12 V bi-directional avalanche breakdown device 600 W peak power dissipation
Response Time	< 1 pico-second
POWER	
Connector	Terminal Block
Voltage	10 to 30 VDC
Power Consumption	0.7 W
Source	External
TERMINAL BLOCKS	
Wire Size	24 to 14 AWG
Torque	4 kgf-cm
LED INDICATORS	
2 DATA LEDs (Green)	Data LED for each side of isolator Flashes when data transmitted
ENCLOSURE	
Material	Plastic
IP Rating	20
Dimensions	1.0 x 3.1 x 3.7 in (2.5 x 7.9 x 9.5 cm)
Mounting	35 mm DIN (Panel Mount Adapter is available)
ENVIRONMENTAL	
Operating Temperature	-40 to 80 C (-40 to 176 F)
Storage Temperature	-40 to 85 C (-40 to 185 F)
Operating Humidity	0 to 95% Non-condensing
MTBF	117316
MTBF Calculation Method	MIL217F Parts Count Reliability
Agency Approvals	CE, FCC

ORDERING INFORMATION

MODEL NUMBER	
485OPDR-HS	High Speed Isolated RS-422/485 Repeater
ACCESSORIES	
Power Supply	MDR-20-24



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APPROVALS AND CERTIFICATIONS

CE		
EN61000-6-2	(Heavy Industrial)	
EN61000-4-2	(ESD)	± 4 kV contact, ± 8 kV air
EN61000-4-3	(RI)	10 V/m, 80-1000 MHz; 3 V/m 1.3 to 2.7 GHz
EN61000-4-4	(EFT Burst)	± 2 kV DC ports; ± 1 kV signal ports
EN61000-4-5	(Surge)	± 2 kV common; ± 1 kV differential
EN61000-4-6	(CI)	10 Vrms, 0.15 to 80 MHz
EN61000-4-8	(Magnetic)	10 A/m, 50 Hz & 60 Hz
OTHER		
IEC60068-2-27	(Shock)	50 G Peak, 11 ms, 3 axes
IEC60068-2-6	(Vibration)	140-500 Hz, 4G, 3 axes
IEC60068-2-32	(Drop)	10 total drops from sides, corner, edges
Emissions	FCC Class B, CISPR Class B (EN55022)	

MECHANICAL DIAGRAM

