

485LDRC9

Industrial RS-232 to RS-422/485 Converter

- ✓ Extend Data up to 4000 ft / 1.2 km
- ✓ 2000V Optically Isolated Data Lines
- ✓ Wide Operating Temperature
- ✓ Modbus ASCII/RTU
- ✓ Automatic Send Data Control
- ✓ Switchable 120Ω Termination
- ✓ Complies with NEMA TS1 & TS2

Environmental requirements for Traffic Control Equipment

The 485LDRC9 is an optically isolated RS-232 to RS-422/485 Converter. RS-232 signals interface through a convenient DB9 F connector or through a terminal block. RS-422/485 signals and the power inputs connect to the terminal block. Built in Send Data Control circuitry eliminates the need for external software to control handshake signals. Optically isolated data lines, with 500W surge suppression, ensures that the connected equipment is protected even in the harshest of environments.

The converter operates on externally sourced 10 – 30 VDC power. The enclosure has a DIN rail mount that is designed to fit easily on a standard 35mm rail. The 485LDRC9 is ideal for your critical industrial communications needs.



Specifications	
RS-232	
Connector	DB9 F (DCE)
Signals	TD, RD, GND
Connector	Terminal Block
Signals	TD, RD, GND
RS-422	
Connector	Terminal Block
Signals	TDA(-), TDB(+), RDA(-), RDB(+), GND
Termination	120Ω (Switchable)
RS-485	
Connector	Terminal Block
Signals	TDA(-), TDB(+), RDA(-), RDB(+), GND
Modes	2-Wire and 4-Wire
Termination	120Ω (Switchable)

Isolation	
Lines Protected	Data Lines
Method	Optical
Rating	2000 V
Surge Suppression	
Lines Protected	Data Lines
Method	TVS
Rating	7.5V bi-directional avalanche breakdown device 500W peak power dissipation
Response Time	< 1 pico-second
Industrial Bus	
	MODBUS ASCII/RTU
Power	
Connector	Terminal Block
Voltage	10 to 30 VDC
Power Consumption	0.5 W
Source	External
Terminal Blocks	
Wire Size	24 to 14 AWG
Torque	4 kgf-cm
LED Indicators	
Power (RED)	On when power applied
TD (RED)	Flashes when RS-422/485 data sent
RD (RED)	Flashes when RS-422/485 data received
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	257448 hours
MTBF Calculation Method	Parts Count Reliability Prediction
NEMA TS1 & TS2	Complies with NEMA TS1 & TS2
Agency Approvals	
	CE, FCC
	cULus Recognized, File E222870
	Declaration of Conformity available for download at www.bb.elec.com
Ordering Information	
Model Number	485LDRC9
Power Supply	An external source is required.
Panel Mount Adapter	DRPM25

