RS-232 to RS-422/485 Converters
SCP211 & SCP311

PRODUCT FEATURES

- Isolated and Non-Isolated Models
- ESD Protection - 8 kV Contact, 15 kV Air
- Rugged Metal Case
- Wide Operating Temperature Models
- Panel Mount with Available DIN Rail Adapters
- Built in Switchable Bias & Termination

The SCP series RS-232 to RS-422/485 serial converters are compact and tough. Each model is designed and tested to meet heavy industrial EMC standards. The RS-232 signal is connected through a female DB9 connector. The RS-422/485 (2-Wire and 4-Wire) signal is connected through a removable terminal block, making wiring easy. Power is connected through a two position removable terminal block. Bit-wise enabled circuitry automatically detects the character time-out eliminating the need to set DIP switches for the baud rate.

Basic model SCP211-DFTB3 is non-isolated and made for less demanding temperature extremes. If you need a wider operating temperature but do not require isolation, model SCP211T-DFTB3 is available. These models should be used when isolation is not required, such as applications in which the data line does not exit the control cabinet.

Model SCP311T-DFTB3 offers 2 kV Isolation and will stand up to -40 to 80° C temperature variations. This is our most rugged model in this series. The SCP311 is an excellent investment for protecting your expensive control equipment.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
SCP211-DFTB3	RS-232 to 422/485 Converter
SCP211T-DFTB3	Wide-Temp, RS-232 to RS-422/485 Converter
SCP311T-DFTB3	Wide-Temp, Isolated, RS-232 to 422/485 Converter

ACCESSORIES

MDR-40-24 - DIN Rail Mount Power Supply 24VDC, 1.7 A output power

DRAD35 - DIN Rail Mounting Clips 35mm

TBKT1 - Replacement Term Block, 2 position 5.08mm

TBKT2 - Replacement Term Block, 5 position 5.08mm

TBKT4 - (2) Replacement Term Block, 5 position 5.08mm

9PAMF6 - RS-232 serial cable DB9 Male To DB9 Female, 6 ft. (1.8 m)

232AMF500 - RS-232 serial cable DB25 Male To DB25 Female, 6 ft. (1.8 m)

SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, GND
RS-422/485 4W	TDA(-), RDA(-), TDB(+), RDB(+), GND
RS-485 2W	DATA A(-), DATA B(+), GND
Data Rate	460.8 Kbps
Isolation	2 kV (SCP311T-DFTB3)
Surge Protection	+/- 0.5 kV DC Ports, +/- 1 kV Signal Ports
Industrial Bus	Modbus ASCII/RTU
Bias	1 KΩ Switchable
Termination	120 Ω Switchable
Connectors	RS-232 – DB9F (DCE) RS-422/485 – Removable Terminal Block

POWER	
Source	External
Power Connector	Terminal Block
Input Voltage	10 to 30 VDC
Power Consumption	1.0 Watt Maximum

INDICATORS	
TD / RD	Green LED (Also used to indicate power)

MECHANICAL	
Dimensions	99x22.9x73.7 mm (3.9x0.9 x2.9 in)
Enclosure	IP 30, Metal
Weight	0.33 lbs, 0.15 kg
MTBF SCP211 Series	313926 Hours
MTBF SCP311-DFTB3	217576 Hours
MTBF Calc. Method	MIL 217F Parts Count Reliability

ENVIRONMENTAL	
Operating Temperature	
SCP211-DFTB3	0 to 70°C
SCP211T-DFTB3	-40 to 80°C
SCP311T-DFTB3	-40 to 80°C
Storage Temperature	-40 to 85°C
Operating Humidity	0 to 95% Non-condensing

APPROVALS / CERTIFICATIONS	
Regulatory	UL Listed, UL File Number: E222870
Emissions	FCC Class B, CISPR Class B (EN55022)
CE	EN61000-6-2:2005 (Heavy Industrial) EN61000-4-2:2008 (ESD) 8kV contact, 15kV air EN61000-4-3:2006 (RI) 10 V/m EN61000-4-4:2004 (EFT Burst) 1kV signal, 2kV power EN61000-4-5:2005 (Surge) 1kV signal, 500V DC, 1kV AC EN61000-4-6:2005 (CI) 10 Vrms

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