



## SER-485 PRO-SI

1 port RS232 to RS422/485 Software Configurable and Opto-isolated Converter



### Overview

The SER-485 PRO-SI is an adapter to convert bidirectional signals from RS232 to RS422 and RS485 in industrial environments. In RS485 mode the data direction is managed by the bitrate adaptive function of ART (Automatic Receive Transmit control). ART analyzes the data in real-time, and adapts to the setup of the RS232 port.

The SER-485 PRO-SI is an optical isolated variant of the SER-485 PRO. Further the device is Surge Protected up to 4kV.

All options and parameters of SER-485 PRO-SI operation are configured by software, controlled via an easy-to-use menu structure. This menu is accessed via standard terminal programs. The SER-485 PRO-SI is a NO Jumper type of device.

With SER-485 PRO-SI often used operation modes are selected by simple DIP switches. The full versatility is controlled by the built-in software configuration menu. The behaviour of RS422 and various options of RS485 are selected by an easy-to-use menu structure.

The internal termination and BIAS (polarization) resistors allow to prepare the RS485 signals for connection to customers networks. These internal resistors are activated by relays, controlled by the configuration menu. There is no need to open the case for configuration.



### Specifications

RS232	DTE/DCE selected by DIP
RS485	Automatic Receive Transmit control (ART) Baudrate adaption in real time
Line adjust	Built-in Termination and Polarization (BIAS) resistors
Operation Modes	RS422 with hardware handshake; RS485 by ART, RTS or DTR RS485 Half- and Full-Duplex; Two basic modes selected by DIP switch
Cable length	Max. 1200 m
Speed	Max. 1Mbps; Max. 250kbps with ART
Connectors	RS232 1x DB9 female RS485/RS422 1 x DB9 male plus Terminal Block (5 c-clamps)

## Specifications

### Software Configuration

Configuration Menu	Various parameters of signal conversion are defined via an easy-to-use menu interface, access is via standard terminal programs (Hyperterminal, miniterm, ...)
Operation Modes	RS422; RS485 by RTS RS485 by DTR; RS485 by ART (Automatic Receive Transmit control)
ART options RS485	Transmit/Receive change as quick, average, standard
Wiring	RS422 (4-wire) RS485 Full Duplex (4-wire) RS485 Half Duplex (2-wire) with Echo RS485 Half Duplex (2-wire) no Echo
Termination	RS422/485 line termination 120 isolated by relay, controlled via software configuration
RS485 BIAS	Bias (polarization) by special drivers, controlled via software configuration

### Power and Environment

Power requirements	9-30V DC, 800mW
Power supply Adapter	12V DC, 500mA
Dimensions	58 x 92 x 28 mm (W×L×H)
Operating Temp	0°C - 60°C
Storage Temp	-20°C - 85°C
Case	SECC sheet metal (1mm)
Weight	160 g

### Approvals

EMC	FCC Class A, CE Class A
Environment	RoHS

## Ordering Information

Art. No	418
Product Name	SER-485 PRO-SI
Packing List	SER-485 PRO-SI Converter, Power Supply, English Documentation
Optional Accessory	DIN-Rail mounting clamp

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