

AT-5IABG

AT-5IABO

RS232 to RS485/422 Converter with Galvanic Isolation

RS232 to RS485/422 Converter with Optical Isolation



- Isolation Voltage Consumption (24VDC). A Serial communication device supporting RS232, RS485, RS422.
- RS232 terminal anti-surge TVS protection 600W / line. Provides flexible data transmission with configuration speed and modes (half/full duplex).
- Serial Communications Input RS232 (DB9).
- Output RS485 (2-wire) or RS232 (4-wire).
- RS485/422 isolation is 1500VDC. Includes build-in protection and isolation for reliable industrial operation.

Introduction

This RS-232 to RS-485 converter is a compact and reliable solution designed for seamless serial communication between devices with different interface standards. It supports bi-directional data transmission with both half-duplex (RS-485) and full-duplex (RS-422) modes, making it suitable for industrial automation and networking applications. A compact converter for reliable RS-232 to RS-485 communication, supporting bi-directional data transfer. Designed for industrial use, it offers DIN-rail mounting, wide voltage input, built-in protection, and stable performance in harsh environments.

Specifications

Serial Specifications

Port Isolation	1) AT-IABG: Galvanic 2) AT-IABO: Optical
Transmission Mode	Bi-direction Half Duplex - RS485 2W Full Duplex - RS422
Baud Rate	DIP : 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Parity	NONE, ODD, EVEN
Data Bits	8 , 9
Stop Bits	1 or 2
ADDC for RS485	Yes
Reverse Voltage/ESD Protection	Yes
Terminating Resistor	Yes in-built 120 ohm
Pull High/ Low Resistor for RS485	Yes in-built 10 kilo-ohm
Serial Signals	1) AT-IABG: RS232 (TxD, RxD, GND) RS485 (A/D+, B/P/D-, GND) 2) AT-IABO: RS232 (TxD, RxD, RTS, CTS, GND) RS485 (A/D+, B/P/D-, GND)

Power Parameters

Power Input	1) AT-IABG: 24 V fixed 2) AT-IABO: 9-36V
Short Circuit Protection	Yes
Power Connector	Terminal Block
RS485/422 voltage protection	6V
RS485/422 over current Re-settable Fuse	200mA
Power Consumption	1) AT-IABG: 0.72 W 2) AT-IABO: 0.48W
Operating Power Supply	9-30VDC wide range, 24V recommended
Isolation Voltage	20mA
RS485/422 isolation	1500VDC
RS485/422 terminal lightning protection	90V, 2KA 8/20us
RS485/422 anti-surge TVS protection	600W/line
RS485/422 terminal Anti-surge TVS	600W/line

Connectivity

RS232	1
RS485	1
Serial Connector Type	RS232 : DB9 RS485 : Terminal Block
Output	RS485 (2-wire) or RS422 (4- wire)

Physical Characteristics

PCB Dimensions (L x W x H)	1) AT-IABG: 60 x 25 x 102 mm
Mounting	DIN-rail

Environment

Operating Temperature	0°C to 60°C
Operating Humidity	20-95% (non-condensing)
Input Reverse Protection	Yes

Order Information

Part No.	Description
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