

RS232/485 Multi-Channel Converter



Overview

The Intelligent Multiplexer combines an ARM microprocessor with dedicated communication circuitry to deliver reliable, stable serial communication for industrial applications. Developed with practical field experience and industrial design requirements in mind, it provides three standard RS485 interfaces for connecting instruments, data acquisition devices, PCs, and servers.

Configurable communication settings and power-off parameter retention simplify integration and reduce setup time.

Key features

- **RS232 or RS485 input:** One serial input for connection to compatible instruments and devices.
- **Flexible protocol support:** Supports transmission of standard Modbus RTU and non-standard Modbus RTU communications.
- **PC and server connectivity:** Standard RS232 or RS485 interfaces enable communication with computers and servers.
- **Multiple-device support:** Supports connections involving multiple data acquisition devices or PCs.
- **Configurable serial settings:** Adjustable baud rate, parity, stop bits, and other communication parameters accommodate connected RS232 or RS485 instruments.
- **Power-off parameter retention:** Stores configuration settings when power is removed, eliminating the need to reconfigure the device after power restoration.

Technical specifications

Parameter	Specification
RS232 or RS485 Input	Modbus RTU or non-Modbus RTU
Supply voltage	12-24 V DC
Operating temperature	-20 to +80 °C
Enclosure dimensions	103 × 75 × 43 mm (L × W × H)

Model selection

Model	Input	Outputs
MX-101	1 x RS232/485 Modbus RTU or non-standard	3 x RS485 multi-master single slave
MX-102	1 x RS232/485 Modbus RTU or non-standard	2 x RS485 multi-master single slave
MX-103	1x RS232/485 Modbus RTU or non-standard	3 x RS485 Modbus protocol
MX-104	1 x RS485 Modbus RTU	3 x 4-20mA