

3-Channel Temperature/mV/Ohm Input Module with RS485

This signal conditioner is a 3-channel temperature/mV/Ohm input module with RS485 communication. It provides isolation between each channel of inputs, power, and network circuits.



Overview

High-Precision Remote I/O Module

The M730 is a versatile 3-channel input module designed for temperature, mV, and Ohm signal conditioning. It features robust five-way isolation to eliminate ground loops between power, input, and network circuitry, ensuring reliable performance in industrial environments. With support for standard Modbus RTU protocols and programmable input types via USB, this module offers flexible integration for remote I/O data acquisition systems.

Input Specifications

Input Channels	3 channels
Supported Input Types	TC (K/E/S/B/R/J/T/N), RTD (PT100/PT200/PT500/PT1000/Cu50), Resistance (0-400 Ω / 0-4000 Ω)mV (+80mV), Voltage (0-1V dc)
Input Impedance	1M Ω
A/D Resolution	24 bit

Communication

Communication Protocol	Modbus RTU
Baud Rate	Up to 115.2 kbps
RS485 Drive Capacity	64 nodes

Performance Metrics

Measurement Accuracy

Input Type	Accuracy
TC	$\pm 1\%$
RTD	$\pm 0.2\%$
Resistance	$\pm 0.05\%$ F.S.
mV	$\pm 10\mu\text{V}$
Voltage	$\pm 10\mu\text{V}$

Response Time	0.4 s
Sampling Rate	9 times/sec

Electrical & Environmental

Ingress Protection

Casing: IP50 • Terminal: IP20

Power Supply	24VDC \pm 10% or AC
Isolation Voltage	e1500VAC/1min
Operating Temperature	-10 to 70°C