

# Temperature/mV/Ohm to Current Signal Conditioner with RS485

This signal conditioner provides a single channel for temperature, mV, or Ohm input and a single channel current output. It uses RS485 communication and provides isolation between input channels, power, and network circuits.



## Overview

### M711 Remote I/O Module

The M711 is a versatile 1-channel signal conditioner designed for temperature, mV, and Ohm inputs with a 1-channel current output. It features robust 4-way isolation to eliminate ground loops and supports standard RS-485 Modbus RTU communication for seamless integration into industrial networks. With programmable input types, hot-swappable capability, and support for both AC and DC power, it is an ideal solution for remote I/O data acquisition systems.

## Input & Output

Supported Input Signals	TC (K/E/S/B/R/J/T/N), RTD (PT100/PT200/PT500/PT1000/Cu50), Resistance, mV, Voltage
Input Channels	1
A/D Resolution	24 bit

## Communication

Communication Protocol	Modbus RTU
Baud Rate	4800 - 115200 bps
Drive Capacity	64 nodes

## Performance

### Performance Metrics

<b>0.4 S</b> Response Time	<b>9 times/sec</b> Sampling Rate	<b>1 W</b> Power Loss
-------------------------------	-------------------------------------	--------------------------

### Measurement Accuracy

Signal Type	Accuracy
TC	$\leq 1^{\circ}\text{C}$
RTD	$\leq 0.2^{\circ}\text{C}$
Resistance	$\leq 0.05\% \text{ F.S.}$
mV	$\leq 10\mu\text{V}$
Voltage	$\leq 10\text{mV}$

## Power & Environment

Power Supply	24VDC $\pm$ 10% or AC
Operating Temperature	-10 to 70°C
Relative Humidity	5-95% non-condensing

## Physical & Construction

Isolation Voltage	$\geq$ 1500VAC/1min
IP Rating	Casing: IP50, Terminal: IP20
Weight	122 g