Model 1701
12-ch 10kΩ Temperature Module

- Accuracy up to ±0.1°F
- 12 channels for 10kΩ NTC thermistors
- Configurable for various 10kΩ NTC thermistors upon request
- Multi-Drop RS-485 bus
- Optional RS-485 to USB adaptor
- Self-diagnostic capabilities
- Low power consumption

The Model 1701 12-ch 10kΩ temperature module is designed as a data acquisition tool for 10kΩ NTC thermistors that can be characterized by the Steinhart-Hart equation.

It enables the collection and transmission of process temperatures of up to 12 probes, simultaneously.

The 1701 has 4 internally calibrated resistors that allow for a field self-check feature that can be remotely launched. This ensures instrumentation accuracy and validation while in service.

SPECIFICATIONS

System	Microcontroller: ATMega328p 16MHz 8-bit Analog to Digital: ADS1115 16-bit ADC w/Internal Reference RS-485 Transceiver: MAX3078
Power	Requirement: 9-34 VDC or 5VDC Power Consumption : 2mA @ 24V, 4mA @ 12V, 8mA @ 5V Protection: Reverse Polarity, ESD/Voltage Spike & Fuse protections
I/O	RS-485 (ASCII) USB 2.0 (Optional) 12x 10kΩ NTC Thermistor Probe
Compatible Hardware	GTW Model 1706 10kΩ thermistor probes
Operating Environment	(-4 to 158)°F & (5 to 95)% Relative Humidity, non-condensing
A/D	Sample Rate: 20 samples /sec per channel Resolution: 16 bits Range: 41°F to 203°F (Accuracy up to ±0.1°F) User configurable Steinhart-Hart coefficients
Ordering Info	Part Number: 1701 - (_) 0 without RS485-USB Adaptor 1 with RS485-USB Adaptor

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