

SPECIFICATIONS



GENERAL	
Dimensions	6.65 in x 4.40 in x 1.41 in (168.9 mm x 111.8 mm x 35.8 mm) <i>Data logger only</i>
Touch Screen Dimensions	5 inches
Number of Channels	8
Weight	1.3 lbs (20.8 oz)
IP Rating	IP20
Start Modes	Immediate Start & Delay Start
Memory	1,000,000 or 5,000,000 readings
Battery Type	Rechargeable 3.7 V Lithium Ion Battery Pack
Battery Life	<ul style="list-style-type: none"> • Continuous on-screen sampling: 7-9 hours depending on display setting and reading rate • Stand-by mode: 100 hours
Data Format	Exported .csv file format, .mtb or both
Time Accuracy	±1 minute/month
Operating Environment	0 °C to +50 °C (32 °F to +122 °F) 0 %RH to 95 %RH non-condensing
Enclosure Material	Polycarbonate, TPE Protective Boot
Calibration	Factory calibration is recommended annually
0 - 24 mA	
Range	-5 mA to 50 mA
Resolution	0.0001 mA
Accuracy	±0.024 mA (0 to 24 mA)
Input Impedance	30 Ω
0 - 100 mV	
Range	-100 mV to 2450 mV
Resolution	0.0001 mV
Accuracy	±0.1 mV (0 to 100 mV)
Input Impedance	1 GΩ
Maximum Voltage	3.0 V
0 - 10 V	
Range	-0.5 V to 12.0 V
Resolution	0.0001 V
Accuracy	± 0.01 V (-0.5 V to 12.0 V)
Input Impedance	1 GΩ
Maximum Voltage	25 V

Specifications subject to change.

FREQUENCY / PULSE	
Maximum Count	4,000,000,000
Maximum Frequency	25 KHz
Input Signal	0 V to 12 V
Input Impedance	58 KΩ
TEMPERATURE PT-100 (2-WIRE RTD) (0.00385 CURVE)	
Range	-200 °C to +850 °C (Probe Dependent) (18.5 Ω to 390.5 Ω)
Resolution	0.01 °C
Accuracy	±0.1 °C (-200 °C to +400 °C) (Probe Dependent) ±0.034 Ω (18.5 Ω to 247.1 Ω)
TEMPERATURE PT-100 (3-WIRE RTD) (0.00385 CURVE)	
Range	-200 °C to +850 °C (Probe Dependent) (18.5 Ω to 390.5 Ω)
Resolution	0.01 °C
Accuracy	±0.1 °C (-200 °C to +400 °C) (Probe Dependent) ±0.034 Ω (18.5 Ω to 247.1 Ω)
TEMPERATURE PT-100 (4-WIRE RTD) (0.00385 CURVE)	
Range	-200 °C to +850 °C (Probe Dependent) (18.5 Ω to 390.5 Ω)
Resolution	0.01 °C
Accuracy	±0.1 °C (-200 °C to +400 °C) (Probe Dependent) ±0.034 Ω (18.5 Ω to 247.1 Ω)
TEMPERATURE NTC-1 (2252)	
Range	-25 °C to +150 °C (Probe Dependent) (29,380 Ω to 41.9 Ω)
Resolution	0.01 °C
Accuracy	±0.50% FSR (Probe Dependent)
TEMPERATURE NTC-2 (10K)	
Range	-25 °C to +150 °C (Probe Dependent) (102,900 Ω to 238 Ω)
Resolution	0.01 °C
Accuracy	±0.50% FSR (Probe Dependent)

RTD Note (All RTD Configurations)

Temperature Specifications based on ideal 100 Ω PT RTD Compliant with IEC 751(1983) and ITS-90. Accuracy based on 4-wire configuration.

BATTERY WARNING: Battery may explode or catch fire if mistreated. Do not disassemble or dispose of in fire. Do not charge except specified with charging condition. Do not heat above 212 °F, or short circuit. Do not crush or modify.

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THERMOCOUPLE TYPE	RANGE	RESOLUTION	ACCURACY
J	-200 °C to +760 °C	0.1 °C	±0.5 °C
K	-270 °C to +1370 °C	0.1 °C	±0.5 °C
T	-270 °C to +400 °C	0.1 °C	±0.5 °C
E	-270 °C to +980 °C	0.1 °C	±0.5 °C
R	-50 °C to +1760 °C	0.5 °C	±2.0 °C
S	-50 °C to +1760 °C	0.5 °C	±2.0 °C
N	-270 °C to +1300 °C	0.1 °C	±0.5 °C
B	50 °C to 1820 °C	0.5 °C	±2.0 °C

Measurement Accuracy

- At room temperature (25 °C ±10 °C) after 60 minute warm-up period.
- Temperature calibrated accuracy is thermocouple dependent.
- Accuracy does not include Cold Junction Compensation (CJC). CJC error: ±1.5 °C

Reading Rate Information

All channels will use the same reading rate.

Reading rates will be capped at 4 Hz when a temperature channel is selected.

- 4 KHz (Supports single channel of voltage or current measurement only)
- 2 KHz (Supports single channel of voltage or current measurement only)
- 1 KHz (Supports single channel of voltage or current measurement only)
- 500 Hz (Supports single channel of voltage or current measurement only)
- 250 Hz (Supports single channel of voltage or current measurement only)
- 100 Hz (Supports single channel of voltage or current measurement only)
- 50 Hz (Supports single channel of voltage or current measurement only)
- 25 Hz (Supports single channel of voltage or current measurement only)
- 10 Hz (Supports multiple channels of voltage or current measurement only)
- 4 Hz
- 1 Second
- 2 Seconds
- 5 Seconds
- 10 Seconds
- 15 Seconds
- 30 Seconds
- 1 Minute
- 2 Minutes
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 30 Minutes
- 1 Hour
- 2 Hours
- 5 Hours
- 10 Hours
- 12 Hours
- 24 Hours