

TR-5i Series - Specifications

Specifications for TR-55i					
Unit Type	TR-55i-TC	TR-55i-Pt	TR-55i-V	TR-55i-mA	TR-55i-P
Measurement Channels	Temperature 1ch	Temperature 1ch	Voltage 1ch	4-20mA 1ch	Pulse Count 1ch
Sensor	Thermocouple: Type K, J, T, S	Pt100, Pt1000 (3-wire)	-	-	-
Measurement Units	°C, °F	°C, °F	V, mV	mA	P
Measurement Range	-199 to 1700 °C	-199 to 600 °C	0 to 22 V	0 to 20 mA (Operational up to 40 mA)	Input Signal: · Non-voltage Contact Input · Voltage Input (0 to 27 V) Detection Voltage Lo: 0.5 V or less Hi: 2.5V or more Input Impedance Approx. 100 KΩ pull up Chattering Filter: ON: 15 Hz or less OFF: 3.5 kHz or less Maximum Count 61,439 / Recording Interval
Accuracy (*1)	Thermocouple Measurement ±(0.3 °C + 0.3 % rdg) [Type K, J, T] ±(1 °C + 0.3 % rdg) [Type S] Cold Junction Compensation ±0.3 °C [10 to 40 °C] ±0.5 °C [-40 to 10 °C / 40 to 80 °C]	±(0.3 °C + 0.3 % rdg) [10 to 40 °C] ±(0.5 °C + 0.3 % rdg) [-40 to 10 °C / 40 to 80 °C]	±(0.5 mV + 0.3 % rdg) [10 to 40 °C] ±(1 mV + 0.5 % rdg) [-40 to 10 °C / 40 to 80 °C]	±(0.05 mA + 0.3 % rdg) [10 to 40 °C] ±(0.1mA + 0.3 % rdg) [-40 to 10 °C / 40 to 80 °C]	
Note: The above temperatures [°C] are for the operating environment of the Input Module.					
Measurement Resolution	Type K, J, T: 0.1 °C Type S: approx. 0.2 °C	0.1 °C	Up to 400 mV : 0.1 mV, Up to 800 mV : 0.2 mV, Up to 999 mV : 0.4 mV, Up to 3.2 V : 1 mV, Up to 6.5 V : 2 mV, Up to 9.999 V : 4 mV, Up to 22 V : 10 mV	0.01 mA	
Logging Capacity	16,000 readings				
Recording Interval	Select from 15 choices: 1, 2, 5, 10, 15, 20, 30 sec. or 1, 2, 5, 10, 15, 20, 30, 60 min.				
Recording Mode	Endless (Overwrite oldest data when capacity is full) or One Time (Stop recording when capacity is full)				
LCD Display Items	Measurements, Recording Status, Battery Life Warning, etc.				
Communication Interfaces	Optical Communication (proprietary protocol) Infrared(IR) Communication (IrPHY 1.2 low power)				
Power (*2)	Lithium Battery: LS14250 x 1				
Battery Life (*3)	Approx. 14 months (10 months with IR Communication Enabled)	Approx. 24 months (14 months with IR Communication Enabled)	Approx. 16 months (11 months with IR Communication Enabled)	Approx. 16 months (11 months with IR Communication Enabled)	Approx. 16 to 24 months (11 to 18 months with IR Communication Enabled)
Dimensions	H 62 mm x W 47 mm x D 19 mm (excluding protrusions and Input Module)				
Weight	Approx. 55 g (including battery / excluding Input Module)				
Operating Environment	-40 to 80°C				
Waterproof Capacity (*4)	IP64: Splash proof (rated for use in daily life) Note: Input Module is not water resistant.				
Accessories	Input Module (TCM-3010)	Input Module (PTM-3010)	Input Module (VIM-3010)	Input Module (AIM-3010)	Input Module (PIC-3150)
Lithium Battery (LS14250), Strap, User's Manual (Warranty Included)					
Data Collection Devices	Communication Port: TR-50U2, TR-50U Data Collector: TR-57DCi				

*1: "rdg" stands for reading.

*2: The included lithium battery (LS14250) is not sold in stores. Please purchase the optional battery set (TR-11P2) for replacement.

*3: Battery life varies depending upon the ambient temperature in which it is used, the recording interval, the frequency of communication, and the battery performance. All estimates are based on operations carried out with a new battery and are in no way a guarantee of actual battery life. Battery life may be shortened further if the unit is used under inverter type fluorescent lighting.

*4: This is the waterproof capacity of the data logger with the Input Module connected.

The specifications listed above are subject to change without notice.