TR-51i / 52i Specifications

Unit Type	TR-51i	TR-52i
Measurement Channels	Temperature 1ch (Internal)	Temperature 1ch (External)
Sensor	Thermistor	Thermistor
Measurement Units	°C, °F	°C, °F
Measurement Range	–40 to 80°C	–60 to 155°C
Accuracy	Avg.±0.5°C	Avg.±0.3°C [–20 to 80°C] Avg.±0.5°C [–40 to –20°C / 80 to 110°C] Avg.±1.0°C [–60 to –40°C / 110 to 155°C]
Measurement Resolution	0.1°C	0.1°C
Reponsiveness	Thermal Time Constant: Approx. 15 min. Response Time (90%): Approx. 35 min.	Thermal Time Constant: Approx. 30 sec. (in air) Approx. 4 sec. (in agitated water) Response Time (90%): Approx. 80 sec. (in air) Approx. 7 sec. (in agitated water)
Logging Capacity	16,000 readings	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 Communication (IrPHY 1.2 low power)	
Power (*1)	Lithium Battery (LS14250) x 1	
Battery Life (*2)	Approx. 4 years (2 years with Infrared Communication Enabled)	
Dimensions	H 62 mm x W 47mm x D 19 mm (excluding protrusions and sensor)	
Weight	Approx. 54 g (including battery)	Approx. 55 g (including battery / excluding sensor)
Operating Environment	–40 to 80°C	
Waterproof Capacity	IP67: Immersion proof	IP64: Splash proof (rated for use in daily life) (*3)
Accessories	-	Temperature Sensor (TR-5106)
	Lithium Battery (LS14250), Strap, User's Manual (Warranty Included)	
Data Collection Devices	Communication Port: TR-50U2, TR-50U Data Collector: TR-57DCi, TR-57U, RTR-57U	

*1: The included lithium battery (LS14250) is not sold in stores. Please purchase the optional battery set (TR-11P2) for replacement.
*2: Battery life depends upon the measuring environment, recording interval, and quality of the battery being used. When infrared communication function is enabled, battery life may be further shortened if the unit is used under the inverter type fluorescent lighting.
*3: This is the waterproof capacity of the data logger with the sensor connected.
The specifications listed above are subject to change without notice.