

MCR Series Specifications

	MCR-4V	MCR-4TC
Measurement Channels	Voltage 4ch	Temperature 4ch
Input Method	Scanning Method, Differential Input, Each Channel Isolated	
Compatible Sensors	-	Thermocouple: Type K, J, T, S, R
Measurement Units	-	°C, °F
Measurement Range	±300 mV, ±1.5 V, ±6 V, ±24 V, Auto (*1) Absolute Maximum Input Voltage: ±50 V	K -270 to 1370 °C S -50 to 1760 °C J -210 to 1200 °C R -50 to 1760 °C T -270 to 400 °C
Input Impedance	Approx. 1.1 MΩ	Approx. 1 MΩ
Input Frequency	DC - 100 Hz	-
Accuracy (*2)	When the 50-60 Hz filter is ON, varies with the Measurement Range as follows: ±300 mV: ±(0.06 mV + 0.3% of reading) ±1.5 V: ±(0.3 mV + 0.3% of reading) ±6 V: ±(0.6 mV + 0.3% of reading) ±24 V: ±(2.4 mV + 0.3% of reading) Auto: According to the range in use	Thermocouple Measurement (Sensor inaccuracies not included) K, J, T : ±(0.5 °C + 0.3 % of reading) at -100°C or above S, R : ±(1.5 °C + 0.3 % of reading) at 100°C or above Cold Junction Compensation ±0.5 °C at 10 to 40 °C ±0.8 °C other temperatures within the operating environment of the logger
Measurement Resolution	50 - 60 Hz Filter: ON 0.01 mV OFF 0.1 mV	0.1 °C
Recording Interval	2, 5, 10, 20, 50, 100, 200, 500 ms. / 1, 2, 5, 10, 15, 20, 30 sec. 1, 2, 5, 10, 15, 20, 30, 60 min. The minimum interval will depend on the number of channels, measurement range, and 50-60 Hz filter setting.	100, 200, 500 ms. / 1, 2, 5, 10, 15, 20, 30 sec. 1, 2, 5, 10, 15, 20, 30, 60 min.
Logging Capacity (*3)	When recording 1 channel : up to 480,000 readings/ch When recording 2 channels : up to 240,000 readings/ch When recording 3 channels : up to 160,000 readings/ch When recording 4 channels : up to 120,000 readings/ch	When recording 1 channel : up to 960,000 readings/ch When recording 2 channels : up to 480,000 readings/ch When recording 3 channels : up to 320,000 readings/ch When recording 4 channels : up to 240,000 readings/ch
Recording Mode	Endless (Overwrite oldest data in the current recording session when capacity is full) or One Time (Stop recording when capacity is full)	
Group Recording	Up to 4 units (16 channels) can be recorded simultaneously. Coupling of MCR-4V and MCR-4TC is possible. (*4)	
LCD Display Items	Measurements, Trend Graph, Battery Level, etc.	
Communication Interfaces	USB Communication	
External Memory	SD Memory Card, SDHC Memory Card (*5)	
Power	AA Alkaline Battery x 2, AA Ni-MH Battery x 2, AC Adaptor AD-05A2 or AD-05C2, USB Bus Power 5V 250mA	
Battery Life (*6)	Approx. 4.5 to 130 days • 4 channels, Instantaneous value recording • With AA alkaline batteries	Approx. 5 to 60 days • 4 channels, Instantaneous value recording • With AA alkaline batteries
Input Terminal Preheat Terminal	Screwless Terminals Compatible Wires Single Wire : φ 0.32 to 0.65 mm (AWG 28 - 22) Twisted Wire : 0.08 to 0.32 mm ² (AWG 28 - 22), φ 0.12 mm or more in diameter Stripping Length : 9 to 10 mm	
Isolation	CH1, CH2, CH3, CH4, USB, and Preheat are isolated. Battery terminals are not isolated from the CH1-CH4 input terminals. CH1- CH4 Maximum Applied Voltage : ± 50 V Electrical Isolation Resistance : 50MΩ or more (DC ± 250 V)	CH1, CH2, CH3, CH4, and USB are isolated. Battery terminals are not isolated from the CH1-CH4 input terminals. CH1-CH4 Maximum Applied Voltage : ± 50 V Electrical Isolation Resistance : 50MΩ or more (DC±250 V)
Dimensions	H 120 mm x W 75 mm x D 32 mm	
Weight	Approx. 140 g	
Operating Environment	Temperature: 0 to 50°C Humidity: 90 %RH or less (no condensation)	
Accessories	AA Alkaline Battery x 2, USB Mini-B Cable US-15C, Software CD-ROM, Card Slot Cover, User's Manual Set (Warranty Included)	

*1: When "Auto" is selected, measurement range will be automatically changed according to the voltage being measured.

*2: MCR-4TC has superior noise filter, but the measurement may sometimes fluctuate due to strong noise. Especially when the recording interval is set to 200 ms or less, the filtering becomes weaker and hence the fluctuation may become greater.

*3: If the logging capacity is not filled at the end of one recording session, the logger can record up to 30 times.

*4: Group Recording may not be started depending on the recording or measurement interval specifications of the connected Master unit.

*5: Please check the T&D Website for information on memory cards whose operation has been confirmed.

*6: Battery life varies depending upon multiple factors including ambient temperature, recording interval, number of measurement channels, and frequency of data export to a memory card. All estimates are based on operations carried out with a new battery and are in no way a guarantee of actual battery life.

The specifications listed above are subject to change without notice.