

Modular 1-Wire Temperature Sensor

RT-O-1WM-TEMP3 / RT-O-1WM-TEMP10

The modular 1-Wire Temperature Sensor is a digital thermometer featuring an easy and accurate temperature measurement. The sensor and the RTCU unit communicate through the modular 1-Wire interface using only a single data wire and a ground. The modular 1-Wire concept makes temperature measurements extremely easy and highly flexible for installations where one or more external temperature measurements are needed.



The modular 1-wire Temperature Sensor features an easy to install and easy to use digital thermometer. The sensor can be used with the RTCU X32 units which supports the 1-Wire interface – for a full list of units supported please refer to the relevant datasheet or technical manual. The modular 1-Wire temperature sensor are delivered with a RJ-45 connector for easy connection to the modular 1-Wire network via a combiner or splitter allowing easy installation in any application. The temperature sensor offers an accuracy of typical +/- 0.5°C and ranges from -55°C to +125°C. The communication between the RTCU unit and the temperature sensor is done through the 1-Wire interface, requiring only a single wire and a ground to establish the data connection. No external power supply is needed as the temperature sensor derives power directly from the 1-wire bus simplifying application set-up. From the RTCU application temperatures are measured with a simple function similar to the known board temperature function. The temperature sensor has a unique factory-lasered 64-bit serial number allowing connection of multiple temperature sensors on the same 1-Wire bus. Please consult the RTCU IDE on-line help for more information about the supported 1-Wire Temperature Sensor functions.

The Modular 1-Wire temperature sensor can be delivered in two length; 3 or 10 meters of cable with a RJ-45 for easy installation into the modular 1-Wire network. If another length is required the modular 1-Wire network is easy expandable with a combiner or splitter and standard UTP network cable.

Key features:

- ❖ External digital temperature measuring
- ❖ Maxim 1-Wire interface
- ❖ Wide temperature range
- ❖ Easy and flexible installation
- ❖ Multiple temperature sensors on the same bus
- ❖ No external power supply requirements

	Min	Typ	Max	
Temperature range	-55	-	+125	°C
Accuracy (+/-)		0.5		°C
Conversion Time			750	ms
Communication interface	Maxim 1-Wire			
Maximum connected sensors			32	
Cable length		3 or 10		m
Humidity (non condensing)	5	-	90	%

Technical data subject to change

For more information:

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