



Logging Thermohygrometer Model THM-2008 MMC

Description

The microprocessor based, small in size thermohygrometer model THM-2008MMC is designed to precise measurement and recording temperature and humidity. Its easy routine maintenance, small size and battery supply provides an excellent comfort of recording and wide application in scientific research, environment measurement, food industry and many others.

The THM - 2008MMC logger is also equipped with internal nonvolatile memory enabling to record up to 50 000 records at intervals ranging from 1 minute to 99 hours. Results recorded in the internal memory might be transferred to the computer PC directly connected to the THM - 2008MMC's RS-232 output.

Also, internal memory can be copied on the **Multi Media Card (MMC)** inserted directly to the THM-2008 MMC housing. Than the MMC can be read-out through a standard memory card reader connected to the computer PC. In the field operation a **portable, battery powered printer can be directly connected** to the THM - 2008 MMC thermohygrometer. The user can select chart or graphs printout using a thermohygrometer's keyboard. This sophisticated thermohygrometer covers temperature range from **-25°C to +60°C** with resolution 0,02°C and humidity range from 5% do 95%RH with resolution 0,5%RH. Higher accuracies, grater than typical electronic thermohygrometers are achieved through a unique linearising technique. Application of the internal microprocessor ensure a minimal measuring error and a large alphanumeric easy-to-read LCD display enable simply read-out of results. Nonvolatile memory stores setup condions (RS-232, log interval, probe calibration) and also user's setting seleted from the keyboard. The meter also includes a real time clock which shows time, day, month and year. The meter accepts a 4 wire Pt - 100 probe, which allows to apply probes with very long cable (up to 10 meters). Humidity measurement is done by thin film sensor. The THM - 2008 MMC features a quick disconnect panel input for a probe. During the process of recording, the thermohygrometer allows read-out with 0,02°C resolution of the current temperature and current humidity with resolution 0,5% and also minimal and maximal values that were int measuring area between switching on and off the meter. The THM-2008 MMC also contains visual alarms. Simultaneous alarm points for temperature and humidity are user selectable. When the current condition exceed any of preset values, special icon on front panel lit. Another icon lit when batteries are near to dead. The long term batteries life is achieved by the user selectable period (never, 2 or 10 minutes) freezing of the readings when the meter is not in use.

Technical data.

Temperature sensor :	Platinum Pt - 100 probe (4 wire)
Relative humidity sensor:	Thin film capacitance sensor
Temperature range:	-25°C to +60°C
Resolution of current temperature:	0,02°C
Resolution of the min/max temperature :	0,02°C
Accuraccy of temperature measurement:	+ 0,15% of the range
Humidity range:	5%RH to 95%RH
Resolution of current humidity :	0,5%RH
Resolution of the min/max humidity:	0,5%RH
Accuracy of relative humidity measurement:	+3%RH @ temperature of calibration point
Temperature and humidity display :	4 x 16 alphanumeric LCD display
Temperature probe calibration:	automatic matching at 0°C
Log interval:	from 1 minute to 99 hours (programmable through the meter's keyboard)
Start/End of the logging :	through the meter's keyboard
Data logging:	
- storing in the nonvolatile, internal memory and further transferable to the PC directly or through the MMC memory card and/or to the portable printer with the time and date stamp as a chart of graphs	
- on-line output to the PC through RS-232 serial interface for further analysis, storage and hard copy printouts	
Digital output:	RS - 232 serial interface output
Internal memory:	up to 50 000 records
Power:	4 x 1,5 V batteries
Housing:	black plastic
Dimensions:	215 x 115 x 42 mm