



COMETER THERMOMETERS

-200 to +1700 °C for thermocouple J,K,S for direct measurement and record



- selection of thermocouple type from the thermometer keyboard
- dual line LCD display with special symbols
- adjustable dual alarm with audio indication for each channel
- memory of minimum and maximum values
- function Hold - manual storing of actual values for later displaying
- automatic compensation of cold junction temperature

Model	Description
CO311	single channel thermometer no PC interface
DO311	single channel thermometer and datalogger with RS232 serial output
CO321	dual channel thermometer with possible reading of temperature difference among channels, no PC interface
DO321	dual channel thermometer with possible reading of temperature difference among channels, datalogger with PC interface

TECHNICAL PARAMETERS - common:

Operating temperature range:	-10 to +60 °C
Connector for probe connection:	subminiature connector for thermocouples
Accuracy without probes thermocouple K (NiCr-Ni):	±(0.4 °C + 0.1% from reading) from -200 to +1300 °C
Accuracy without probes thermocouple J (Fe-Co):	±(0.4 °C + 0.1% from reading) from -200 to +750 °C
Accuracy without probes thermocouple S (PtRh-Pt):	±(0.85 °C + 0.1% from reading) from -50 to +1700 °C
Resolution thermocouple J,K:	0.1 °C from -99.9 do +999.9 °C, otherwise 1 °C
Resolution thermocouple S:	0.4 °C from -50.0 do +999.9 °C, otherwise 1 °C
Power:	battery 9V, typical life 2 months
Dimensions without probes:	141 x 71 x 27mm

TECHNICAL PARAMETERS - thermometers with logging function (types DO311, DO321)

Modes of logging:	<ol style="list-style-type: none"> 1. manual logging - capacity of 1000 stored temperature sets 2. automatic non-cyclic logging (logging stops after filling the memory) - total capacity of 16000 values 3. automatic cyclic logging (logging continues after filling the memory - oldest values are replaced by newest) - total capacity approx. 15200 values (14400 values for DO111)
Real time clock:	year, leap year, month, day, hour, minute, second
PC interface:	serial RS232
Logging interval:	18 adjustable values from 10s to 24hours

Thermometers are delivered without probes. To order probes, please see **Optional accessory**.

Included accessory:

Traceable calibration certificate from the manufacturer, instruction manual. Calibration certificate with declared metrological traceability of etalons is based on requirements of EN ISO/IEC 17025 standard.

All thermometers are also equipped with connector for external ac/dc adapter.

- Dataloggers DO311, DO321 come complete with a plastic transport case, 9V battery, communication cable for PC and self adhesive Dual Lock for easy mounting.

Free Windows program is ready to download at www.cometsystem.cz

Program enables to control all logger functions and viewing and printing of data in numerical and simple graphic formats. It is possible to export data to dbf or txt formats.

- Instruments with no PC interface CO311, CO321 are delivered in a plastic case. 9V battery is included.

Optional accessory:

- MP006** - RS232/USB converter for communication with the PC via USB port

- SW100** - CD with free PC program

- probes** with the "K" thermocouple with subminiature connector are specified at the end of catalog

- A1515** - adapter 230V-50Hz/12Vdc. 9V battery should be replaced with NiCd accumulator 9V

- A3400** - NiCd accumulator 9V

- SWR004** - Optional software for Windows - color printing, vertical and horizontal zoom of graphs and other functions