

COMETER - THERMOMETERS, HYGROMETERS, BAROMETERS for measurement and record



C3120, D3120
C4130, D4130

- 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

Instruments are designed for direct measurement and datalogging to internal nonvolatile memory in adjustable time interval. Recorded data is possible to transfer by means of free program via serial Rs232 link to a PC for archiving or analyzing. Instrument is connected to a PC by included communication cable only for data transfer from the memory. During connection to the PC nor measurement and record is enabled. Instruments are designed for non-aggressive air measurement.

Cxxxx Dxxxx

TECHNICAL PARAMETERS - all instruments:

| | |
|---------------------------------------|---|
| Operating temperature range: | -10 to +60 °C |
| Temperature sensor: | RTD |
| Accuracy of temperature measurement: | +0.4 °C at range -50 to +100 °C, +0.5% from reading from +100 to +250 °C |
| Accuracy of air humidity measurement: | +2.5%RH at 23 °C at range 5 to 95%, resolution 0.1% |
| Accuracy of dew-point reading: | +0.5 °C at range 30 to 95%RH |
| Accuracy of air-pressure measurement: | +2hPa at 23 °C, resolution 0.1hPa |
| Power: | battery 9V |
| Battery life: | 4 months typically (barometers 2 months typically) |
| Dimensions: | 141 x 71 x 27mm |

TECHNICAL PARAMETERS - loggers (model names beginning from D) :

| | |
|------------------------------------|---|
| Modes of logging: | <ol style="list-style-type: none"> 1. manual logging - capacity of 1000 stored value sets 2. automatic noncyclic 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 being replaced by newest) - total capacity approx. 15200 values |
| Real time clock: | year, leap year, month, day, hour, minute, second |
| PC interface: | serial RS232 |
| Sampling interval in logging mode: | 18 adjustable values from 10s to 24hours (10s, 1min, 2min, 3min, 4min, 5min, 10min, 15min, 20min, 30min, 1h, 2h, 3h, 4h, 6h, 8h, 12h, 24h) |

INSTRUMENTS ARE AVAILABLE IN THE FOLLOWING MODELS:

| Model | Description | Measuring range |
|-------|--|---|
| C3120 | THERMOMETER-HYGROMETER with switchable dew-point temperature reading, built-in sensors | temperature -10 to +60 °C relative humidity 5 to 95%RH |
| D3120 | same as C3120, in addition 3 logging modes with PC interface | |
| C3121 | THERMOMETER-HYGROMETER with switchable dew-point temperature reading and external temperature-humidity probe with 1meter cable. Cable lengths 2 meters and 4 meters available optionally. Probe diameter of 18mm, length of 135mm. | temperature -30 to +105 °C* Relative humidity 0 to 100%RH |
| D3121 | same as C3121, in addition 3 logging modes with PC interface | |
| C3631 | THERMOMETER-HYGROMETER with switchable dew-point temperature reading, built-in sensors. A Cinch connector for connection of an external RTD Ni1000/6180ppm temperature probe. Surface, pointed-tip, insertion and other probes with Cinch connector are available. Indication of temperature difference of external probe and dew-point temperature. | air temperature -10 to +60 °C probe temperature -50 to +250 °C relative humidity 5 to 95%RH |
| D3631 | same as C3631, in addition 3 logging modes with PC interface | |



031-150/C - surface temperature probe -30 to +150 °C with Ni1000 sensor on 1meter cable for C3631, D3631 instruments



031-60 - surface temperature probe -10 to +60 °C with Ni1000 sensor for direct plug in C3631, D3631 connector

Cxxxx Dxxxx

| Type | Description | Measuring range |
|-------|--|--|
| C3633 | THERMOMETER-HYGROMETER simultaneous reading of temperature and relative humidity, dew-point temperature reading selectable, built-in sensors. Surface temperature probe on the instrument back side with attaching magnets. Indication of temperature difference of surface probe and dew-point temperature. Adjustable audio and optical alarm for indication of the temperature difference for application of surface coatings | air temperature -10 to +60 °C surface temperature -10 to +60 °C relative humidity 5 to 95%RH |
| D3633 | same as C3633, in addition 3 logging modes with PC interface | |
| C4130 | THERMO-HYGRO-BAROMETER with switchable dew-point temperature reading, built-in sensors, air pressure trend reading for last 3 hours | temperature -10 to 60 °C relative humidity 5 to 95%RH air pressure 800-1100hPa |
| D4130 | same as C4130, in addition 3 logging modes with PC interface | |
| C4141 | THERMO-HYGRO-BAROMETER with external temperature-humidity probe on a 1 meter cable. Built-in indoor temperature and air pressure sensors. Switchable dew-point temperature reading, air pressure trend reading for last 3 hours. Cable lengths 2 meters and 4 meters available optionally. Probe diameter of 18mm, length of 135mm | outdoor temperature -30 to 105 °C* indoor temperature -10 to 60 °C relative humidity 0 to 100%RH air pressure 800-1100hPa |
| D4141 | same as C4141, in addition 3 logging modes with PC interface | |

* Temperature from +85 to +105 °C with the limitation specified in the graph

Included accessory:

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

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

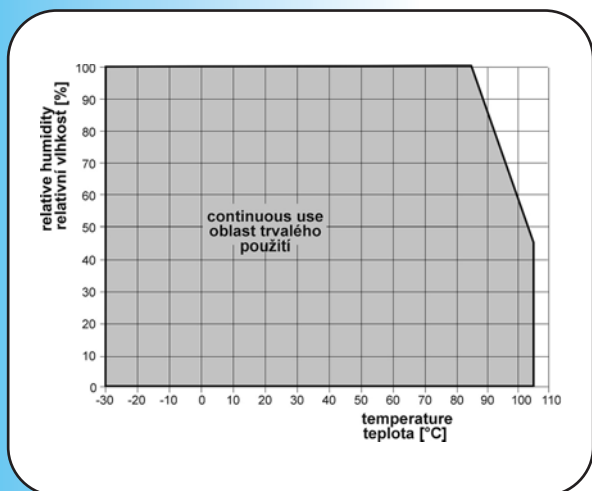
Loggers (models Dxxxx) come complete with a plastic transport case, 9V battery, communication cable for PC. Free Windows program is ready to download at www.cometsystem.cz

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 (models Cxxxx) are delivered in a plastic case. 9V battery is included.

Optional accessory:

- **MP006** - RS232/USB converter for communication with the PC via USB port
- **F5200B** - sensor protection with filter from stainless steel mesh for instruments C3121, D3121, C4141, D4141. Filtering capability 0.025mm.
- **F1000** - sensor protection from sintered bronze for instruments C3121, D3121, C4141, D4141. Filtering capability 0.025mm.
- for easy mounting of C3121, D3121, C4141, D4141 instruments probes it is possible to order circular plastic flange **PP4** with gland or right-angled stainless steel flange **PP90** with gland for wall mounting.
- **A1515** - adapter 230V-50Hz/12Vdc. 9V battery should be replaced with NiMH accumulator 9V.
- **A3400** - NiMH accumulator 9V
- **SW100** - CD with free PC program for Dxxxx loggers
- **SWR004** - Optional software for Windows - color printing, vertical and horizontal zooming of graphs and other functions (only for Dxxxx loggers) - see page 23
- **SWR007** - program package Database Logger Program for work with data from Dxxxx loggers - see also page 23.



C3121, D3121,
C4141, D4141



F5200B sensor cover with filter from stainless steel mesh

F0000 sintered bronze filter