

# OPERATION MANUAL

## Humidity/temperature measurement system Hytelog Multisensor with USB-interface

### Description



### Characteristics features

- Combined Temperature and Humidity measurement
- Three RJ12-connecting sockets
- Resolution 0.01 % RH, 0.01°C
- Accuracy 1,8 % RH, 0.2°C
- Inclusive of Windows-Software "PCLOG"

### Areas of application

- Monitoring of stock rooms, in quality assurance or air conditioning systems
- Systems engineering

### Windows-Software „PCLOG“

- Calculation and display of dew point, absolute humidity, vapour pressure, saturated vapour pressure and enthalpy
- Tabular representation of measured values
- Storing of data on hard disk

### Technical data

<b>Humidity measurement</b>	
Humidity measuring range	0 ... 100 % RH
Humidity resolution	0.01 % RH
Typical accuracy	±1,8 % RH (at 23 °C)
<b>Temperature measurement</b>	
Temp. measuring range	-40 ... 125 °C
Temperature resolution	0.01 °C
Accuracy	±0.2 °C between 0 and 60 °C
<b>Module</b>	
Power supply	Over the USB port
Operating current	Approx. 50 mA
Interface	USB-interface, 1.1 und 2.0 compatible
Probe dimensions	150 x Ø12 mm
CE-conformance	2014/30/EU
EMV-noise emission:	EN 61000-6-3:2011
EMV-noise withstanding:	EN 61000-6-2:2011
Scope of supply	Transducer with USB-connection cable, CD with Windows-Software and data sheets
Artikelnr.	See ordering numbers on page 2

### Description

The product offers an efficient measurement and display system for up to 3 sensors for temperature and relative humidity. The scope of supply includes a port converter, which enables direct operation through the USB port of a PC. The software „PCLOG“ and an USB-connection cable are also in the scope of delivery.

For measuring humidity and temperature you can use the sensors HYT221, HYT271 or HYT939. The high quality polymer sensor guarantee outstanding measuring accuracy and long-term stability, also under extreme operating conditions.

The current measured values are transferred to the connected PC through the USB interface. The display and graphical representation of the measured values appear on the PC. An easy to use Windows software for display of measured values and data representation is included in the scope of supply.

The USB driver software emulates a serial COM-port. The ASCII-protocol for data communication is documented and enables integration with user's own developed programs.

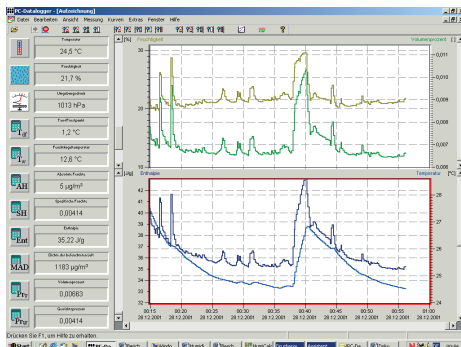
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### Software „PCLOG“

Besides storing data on hard disk, the software offers a very important feature of graphical representation of all measured and recorded channels in the form of humidity and temperature Vs time chart (online scriber function). By means of Drag & Click, the window section can be enlarged and the time or temperature axis can be scaled as desired. Besides the graphic view, representation is also possible in the form of a table. The in-between space is used for capturing measured data series into a spreadsheet program (for example EXCELTM) or for word processing. All tables and graphic representations can be printed out in colour. In addition, simple monitoring and control functions are also integrated in the software. Limits can be set for each channel. An acoustic signal (Wave file) is given out when the values are exceeded.

A speciality of the program is the integrated hx-calculator. This calculates further fifteen parameters like dew point, absolute humidity, enthalpy, the wet bulb temperature, the vapour pressure and saturated vapour pressure etc. from the measured values of relative humidity and temperature.



### First time operation

Connect the humidity measuring system to the USB- Interface of the Computer. Please start the software „PCLOG“.

Download: <https://download.bb-sensors.com/index.php/login>

Login: bb-shop Password: BBshop#2017

The required settings are done. If no interface is found, please choose the interface by hand. The record window is opened, when the measuring system is identified. If a sensor is identified, you can see the values on the left side. Then you can choose the value you want to record in the record window. Right click on the record window and choose „formatting and axes“. In the menu you can choose the values you want to record. With the button „Start recording“ the record will be started.

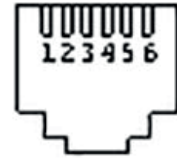
### Attention

Please avoid extreme mechanical and inappropriate exposure.

The device/product is not suitable for potential explosive areas and medical-technical applications.

### Pin assignment

1 VDD	2 GND
3 SDA	4 SCL
5 GND	6 NC



### Ordering numbers

Article	Articleno.
Humidity and temperature measuring system Hytelog Multisensor inkl. 1 m USB-connection cable, operation manual and software	0567 0001
Humidity and temperature measuring system Hytelog Multisensor- Set 1 inkl. digital humidity/temperature probe with I <sup>2</sup> C-interface art. no. 0636 0011, cable length 3 m, 1 m USB-connection cable and service case with operation manual and software	0570 0001
Humidity and temperature measuring system Hytelog Multisensor- Set 2 inkl. digital humidity/temperature module with I <sup>2</sup> C-interface art.no. 0626 0110-05, 1 m USB-connection cable and service case with operation manual and software	0570 0002
Humidity and temperature measuring system Hytelog Multisensor- Set 3 inkl. digital humidity/temperature probe HYT131 art.no. 0636 0016, 1 m USB-connection cable and service case with operation manual and software	0570 0004

Accessories	Articleno.
Digitale humidity/temperature module with I <sup>2</sup> C interface	0626 0110-05
Connection cable for humidity/temperature probe, Art.-Nr. 0626 0110-05, Length 2 m, TPE-sheath	0409 3004
Digital humidity/temperature probe with I <sup>2</sup> C-interface, cable length 3 m	0636 0011
Digital humidity/temperature probe HYT131	0636 0016



**Please note that if up to 3 digital humidity / temperature probes are connected at the same time, the I<sup>2</sup>C addresses must be different.**

Digital humidity / temperature sensor with I<sup>2</sup>C interface 0636 0011 I<sup>2</sup>C address: 0x28

Digital humidity / temperature sensor with I<sup>2</sup>C interface 0636 0011-09 I<sup>2</sup>C address: 0x29

Digital humidity / temperature sensor with I<sup>2</sup>C interface 0636 0011-10 I<sup>2</sup>C address: 0x2A