

## PRODUCT DESCRIPTION

Comimeters of Cxxxx family are (depending on the device type) designed for measurement of temperature and relative humidity around the device (or external probe), atmospheric pressure and the pressure tendency with the possibility of displaying the dew point temperature and atmospheric pressure value corrected to the sea level. Measured values are displayed on a dual line LCD display. The measured values (except pressure tendency) are compared with two adjustable levels for each measured quantity. Breaking the level is indicated by blinking the proper value on display and by audio indication (switchable). Devices are equipped with memory of minimum and maximum values and Hold function. Minimum and maximum values and Hold value are possible to display on the LCD anytime.

## OPERATION

### Switching ON and OFF the device

The device turns on and off with the button „ON/OFF“. Then the all symbols appear on the display to verify proper function.

### Displaying of actual measured values

Use button „DISPLAY“ to select the actual measured values you wish to view on LCD display (does not apply to C0111 type).

device	C0111	C0121	C3120	C3121	C3121P	C3631	C3633	C4130	C4141	
upper line	T <sub>1</sub>	T <sub>1</sub>	T	T	T	T <sub>INT</sub>	T <sub>INT</sub>	T	T <sub>EXT</sub>	T <i>temperature</i>
lower line	---	T <sub>2</sub>	RV	RV	RV	RV	RV	RV	RV	RV <i>relative humidity</i>
upper line		T <sub>1</sub>	T	T	T	T <sub>EXT</sub>	T <sub>EXT</sub>	P	T <sub>INT</sub>	P <i>atmospheric pressure</i>
lower line		T <sub>1</sub> – T <sub>2</sub>	T <sub>DP</sub>	T <sub>DP</sub>	T <sub>DP</sub>	T <sub>DP</sub>	T <sub>DP</sub>	T <sub>DP</sub>	T <sub>DP</sub>	DP <i>dew point</i>
upper line						T <sub>EXT</sub>	T <sub>EXT</sub>	„tEnd“	P	INT <i>internal sensor</i>
lower line						T <sub>EXT</sub> – T <sub>DP</sub>	T <sub>EXT</sub> – T <sub>DP</sub>	TEND	T <sub>DP</sub> EXT	EXT <i>external sensor</i>
upper line									„tEnd“	TEND <i>pressure tendency</i>
lower line									TEND	

Press button „HOLD“ in the default mode (displaying of actual measured values) to store all actual measured values to internal memory. Press „MIN“ („MAX“) buttons (in the default mode) to display the minimum (maximum) value of the currently displayed measured quantity.

### Functions and settings available from menu

Press button „MENU“ to enter into the mode of viewing all menu items. The required item select using the arrow buttons. To return to the default mode (displaying of actual measured values) press button „MENU“.

- ALAr** after pressing the button "ENTER" it is possible to set lower (**ALLO**) and upper (**ALHI**) limit for each measured quantity (except pressure tendency). To set limits of the C0111 device press button "ALARM".
- AUdI** by pressing the button „ENTER“ switch on (**On**) or switch off (**OFF**) audio signalling of alarm indication
- CLr** after pressing the button „ENTER“ is cleared memory of minimum and maximum values (this is confirmed by reading **YES**)
- HOLD** press the button „ENTER“ to display values stored in the HOLD memory (the measured quantity select by button „DISPLAY“)
- bAt** voltage value of partially loaded battery is displayed (this value illustrates battery condition)
- CALC** by pressing the button „ENTER“ you enter into the mode of setting correction the atmospheric pressure to the sea level
- d.rEF** by pressing the button „ENTER“ select the fast (**FASt**) or dynamic (**dYn**) refresh mode
- InFO** gradual by pressing the button „ENTER“ are displayed: storing interval – the actual logging mode – the memory occupation – service information about software version together with device configuration

## BATTERY REPLACEMENT

Low battery voltage is indicated with blinking reading "BAT" on the display. It is necessary to replace battery with new one as soon as possible. Battery is located under small cover on the instrument lower side. It is absolutely necessary to replace battery with instrument switched OFF. Do not disconnect the button „ENTER“ for longer than 1 minute even if instrument is switched OFF. If it happens (or if battery is totally discharged), it is necessary to set again in appropriate menu selection LCD refreshment mode (d.REF.), alarm audio indication (AUDI) and clear the memory of minimum and maximum values (CLR).

## WARNING



- It is not allowed to touch the sensors under the cover to prevent damage the sensors.
- The sensors (under the cover) should not be exposed to direct contact with water or other liquids.
- Do not connect or disconnect an external probe if the device is turned on (the incorrect value could be stored into the memory of the minimum and maximum values).
- The sensors (under the cover) should not be exposed to direct contact with water or other liquid.
- Devices contain electronic components, it needs to liquidate them according to currently valid condition.
- **To complement the information in this data sheet read the manuals and other documentations that are available in the Download section for a particular device at [www.cometsystem.com](http://www.cometsystem.com).**

## TECHNICAL SPECIFICATIONS

Device type	C0111	C0121	C3120	C3121, C3121P	C3631	C3633	C4130	C4141
Temperature measuring range - around the device	---	---	-10 to +60 °C	---	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C
Temperature measuring range - surface contact probe	---	---	---	---	---	-10 to +60 °C	---	---
Temperature measuring range - external RH+T probe	---	---	---	-30 to +105 °C	---	---	---	-30 to +105 °C
Accuracy of temperature measurement	---	---	± 0.4 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C
Temperature measuring range - Ni1000/6180 probe *	-50 to +250 °C	-50 to +250 °C	---	---	-50 to +250 °C	---	---	---
Relative humidity measuring range	---	---	5 to 95 %RH	0 to 100 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	0 to 100 %RH
Accuracy of humidity measurement **	---	---	± 2.5 %RH	± 2.5 %RH	± 2.5 %RH	± 2.5 %RH	± 2.5 %RH	± 2.5 %RH
Atmospheric pressure measuring range	---	---	---	---	---	---	800 to 1100 hPa	800 to 1100 hPa
Accuracy of atmospheric pressure measurement at 23 °C	---	---	---	---	---	---	± 2 hPa	± 2 hPa
Dew point temperature measuring range	---	---	-40 to +60 °C	-50 to +80 °C	-40 to +60 °C	-40 to +60 °C	-40 to +60 °C	-50 to +80 °C
Accuracy of dew point temperature measurement ***	---	---	± 1.5 °C	± 1.5 °C	± 1.5 °C	± 1.5 °C	± 1.5 °C	± 1.5 °C
Temperature operating range of the device	-30 to +65 °C	-30 to +65 °C	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C	-10 to +60 °C
Relative humidity operating range (without condensation)	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH	5 to 95 %RH
Temperature operating range of the external probe	---	---	---	-30 to +105 °C	---	---	---	-30 to +105 °C
Relative humidity range of the external probe	---	---	---	0 to 100 %RH	---	---	---	0 to 100 %RH
Average current consumption from battery ****	0.08 to 0.3 mA	0.08 to 0.3 mA	0.15 to 0.7 mA	0.15 to 0.7 mA	0.2 to 0.8 mA	0.2 to 0.8 mA	0.3 to 1.3 mA	0.3 to 1.3 mA
Protection class	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Weight without external probe	150 g	150 g	155 g	150 g	155 g	200 g	155 g	150 g
Dimensions [mm]	146 x 71 x 27	146 x 71 x 27	191 x 71 x 27	141 x 71 x 27	191 x 71 x 27	191 x 71 x 39	191 x 71 x 27	141 x 71 x 27

\* Accuracy including supplied probe  
 ± 0.4 °C from -50 to +100°C  
 ± 0.5 % from reading from +100 to +250 °C  
Accuracy of the input (without probe)  
 ± 0.2 °C from -50 to +100°C  
 ± 0.2 % from reading from +100 to +250 °C

\*\* from 5 to 95 %RH at 23 °C

\*\*\* at temperature T < 25 °C and RH > 30 %  
 (for more details see graphs in the manuals)

\*\*\*\* the value of the average current consumption is in the mode of FAST higher than in the mode of the dynamic  
 if you are using external ac/dc adapter 12 Vdc, the internal battery 9V should be replaced with NiMH 9V accumulator

