

User Manual

Thermohygrometer
UR 100

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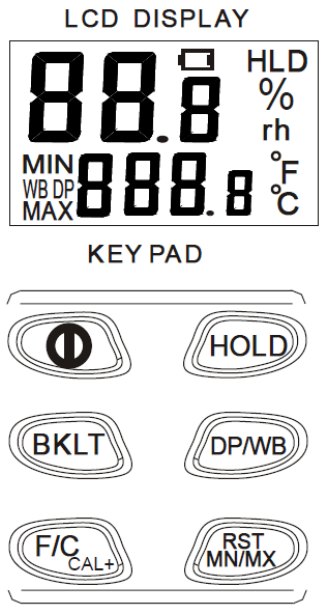
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1. Introduction

Thank you for purchasing our UR100 thermohygrometer. Equipped with an external probe with microprocessor, it's a quick and easy-to-use instrument that is also useful for measuring Wet bulb and Dew point, as well as humidity percentage. This product includes:

- the UR100 thermohygrometer;
- the external probe;
- 4 AAA batteries;
- the user manual;
- the hard carrying case.

2. Display, keyboard and functions



Switch on: press ⏻ to turn on the instrument. There's set an "AUTO-SLEEP" of 20 minutes. Pressing again ⏻, the instrument will switch off from any mode.

Backlight: press "**BKLT**" key to switch on the LCD backlight for 10 seconds.

Unit of measurement: in standard measurement mode, press "**F/C CAL+**" to change the unit of measurement between °C and °F.

"HOLD" function: in standard measurement mode, press "**HOLD**" to lock the reading on the current value. Press "**HOLD**" again to unlock.

"Air/Dew Point" and "Wet bulb": press "**DP/WB**" to change the measurement mode (standard, DP and WBT).

"MIN/MAX" function: press "**RST MN/MX**" to change the display between current measurement, minimum and maximum value. Press "**RST MN/MX**" for more than one second to reset the minimum and maximum value to zero.

"Auto-Sleep" function: by default, there is set auto-sleep after 20 minutes of power on without use. To remove this function, with instrument off, press ⏻ + "**HOLD**" during switch on.

3. Calibration

1. With the instrument off, insert the probe into a 32,8% salt bottle and press ⏻ + "**F/C CAL+**" for more than one second until the instrument is switched on. The instrument will enter calibration mode.
2. On the display it will flash "3x,x%" (FIG. 1). Wait 30 minutes, the display will stop flashing. One-point calibration is finished and saved. You can also terminate and save the calibration manually by pressing the "**F/C CAL+**" button for more than one second.

FIG 1 → 32.8 % rh

3. The same thing can also be done on two points: after completing the first point, with the instrument switched on, insert the probe into a 75.3% salt bottle and press "**RST MN/MX**" for more than one second.
4. "7x.x%" will flash in the display. Wait 30 minutes, the display will stop flashing. The two-point calibration is finished and saved. You can also terminate and save the calibration manually by pressing the "**F/C CAL+**" key for more than one second.

Notes: the "AUTO-SLEEP" function is automatically disabled during the calibration procedure.
To achieve high accuracy, calibration should be carried out in an air-conditioned environment at approximately 23 °C and with constant air flow.
After the calibration is finished, if the value in "7x,x%" and/or "3x,x%" differs by ±0,3%, it means the calibration has failed: try again.

4. Troubleshooting

Problem description	Solution
It doesn't switch on	Make sure you press the power button for more than one second. Check status/replace batteries.
Display disappears	Check status/replace batteries. Instrument on for too long (“AUTO-SLEEP” function is activated), remove “AUTO-SLEEP” function.
Failed calibration	Check status/replace batteries. Check the integrity of salt bottles. Ensure that the room temperature is suitable.
E 11	Calibration error, try again.
E 33	Electronic problem, contact the distributor.
E 34	Electronic problem, contact the distributor.

5. Data sheet

RH measurement range	0 … 100%
Temp measurement range	-10 … 60°C
DP measurement range	-73,4 … 59,9°C
WBT measurement range	-13,4 … 59,9°C
RH accuracy	±3% in 10 … 90% ±5% in the rest of the scale
Temp accuracy	±0,6°C
Storage temperature	-20 … 60°C
Working temperature	0 … 50°C



Electrical and electronic equipment with this symbol affixed may not be disposed of in public landfills.
In accordance with the WEEE Directive 2012/19/EU, European users of electrical and electronic equipment have the option of returning used equipment to the Distributor or Manufacturer when purchasing new equipment.
Illegal disposal of electrical and electronic equipment is punishable by administrative fine.