E200

Version V1 (8/2003)

C E

Contents

1 Read before operating for the first time

- The operating instructions should be read carefully before the device is used and followed in every detail.
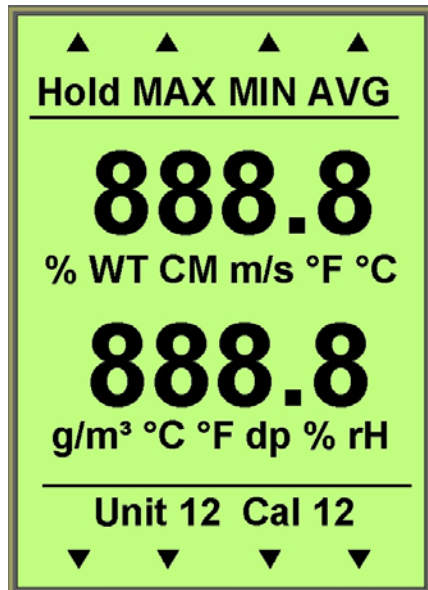
- Never take any measurement of electrically live components

- Remain within the measuring ranges of the sensors (overheating can lead to their destruction)

- Carry out temperature and humidity equalisation only with appropriate reference.

- When moved from one location to another with different climatic conditions the device needs an acclimatisation period of several minutes.

Appropriate Use:

- The measuring device must only be operated within the specified technical parameters.
- The measuring device must only be used under the conditions and for the purposes for which it was designed.
- Operational safety can no longer guaranteed in the case of modifications or adaptations.

2 The Display

▲   ▲   ▲   ▲

Hold MAX MIN AVG

888.8

% WT CM m/s °F °C

888.8

g/m³ °C °F dp % rH

Unit 12 Cal 12

▼   ▼   ▼   ▼

◄ Upper menu

◄ Temperature display (Sensor 1)

◄ Rel. humidity display (Sensor 2)

◄ Lower menu

THUMB-WHEEL

3 Operation

In contrast to conventional hand-held measuring devices the E200 measuring device does not have a keypad but what is known as a "*THUMB-WHEEL*" on the left-hand side of the device.

The wheel can be turned up or down through 15° and can also be pressed in the middle position.

Turning the wheel up selects the upper menu. Turning the wheel down selects the lower menu for configuration and equalisation.

The 3 positions of the **THUMB-WHEEL**

▲ Turn up

▼ Turn down

► Press in the middle position

To switch on: ► (press briefly)

To switch off: ► press for approximately 2 seconds

(no menu activated)

Upper menu: ▲ (press briefly), select with ▲,

confirm with ►

Lower menu: ▼ (press briefly), select with ▼,

confirm with ►

the display. The menu can be cancelled by ▼ or by not pressing for 20 seconds.

Hold: Hold "freezes" the measured value.

MAX: MAX displays the maximum value in the active period.

MIN: MIN displays the minimum value in the active period.

AVG: AVG indicates the arithmetical average value while activated.

4 The Upper Menu

The standard functions:

HOLD MAX MIN AVG

can be selected in the upper menu. Select with ▲. The selected function flashes and is confirmed by means of ►. Once confirmed, the function is shown steady on

5 The Lower Menu

The functions:

Unit 1 2 CAL 1 2

can be selected in the lower menu. Select with ▼. The selected function flashes and is confirmed by means of ►. The menu can be cancelled by ▲ or by not pressing for 20 seconds.

Unit1: With Unit1 you select the unit of temperature. You have a choice of °C and °F. You can select with ▲ and ▼; confirm by ►.

Unit2: With Unit2 you select the unit of the rel./abs. humidity or the dew-point temperature. You have a choice of g/m³, %r.h. dp°C, dp°F.
You can select with▲ and ▼ and confirm with ►.

20.0
°C

0.0
°C

CAL 1

Single-point calibrations of temperature and rel. humidity

CAL1: With CAL1 (single-point calibration) you set the offset for Sensor 1 (temperature). The offset is shown in the lower part of the display. Maximum offset is +/- 10°C or +/- 10°F.

You can select with ▲ and ▼ and confirm with ►.

The original works settings can be achieved by setting the offset to 0.0.

0.0

%rH

80.0

%rH

CAL 2 L

CAL2: With CAL2 (single-point calibration) you set the offset for Sensor 2 (rel. humidity). The offset turns the characteristic line about the lower equalisation point (11% r.h.). The equalisation point must be in the range of 30% ... 95% r.h.

The offset is shown in the upper half of the display. Maximum offset is +/- 10%rH. CAL2 can only be selected in connection with the unit % r.h.

You can select with▲ and ▼ and confirm with ►.

The original works settings are achieved by setting the offset to 0.0.

6 Replacing the battery

When the message "BAT" appears on the display, you have a few hours of battery life left. Open the battery cover on the front of the device. Remove the discharged battery and replace it with a new one.

Please use only 9V E-Block (PP3) batteries.

When inserting batteries please ensure that they are the right way round and use only high-quality batteries.

7 Maintenance and adjustment

When used in the area of climate-control technology we recommend annual maintenance. Recalibration should be carried out more frequently in a harsh environment.

For the purposes of calibration you should use the calibration block that can be obtained as an accessory, and the appropriate calibration fluids.

Before it is checked or adjusted the device and the calibration block should be stored at a temperature of approximately 20°C..25°C for 12 hours.

Recalibration should only be carried out in the calibration block or, better still, at accredited laboratories.

Clean the device with a damp cloth as and when necessary. Do not use any cleaning fluids, just plain water to dampen the cloth. Do not touch the sensor.