

## Programmable Hygro-/Thermometer H5800



- ◆ Good accuracy at low consumption
- ◆ Operates with COMECO humidity handheld probes
- ◆ Humidity and temperature measurement
- ◆ Automatic temperature compensation of the RH probe
- ◆ 4-digit LCD display with mode indication
- ◆ Programmable auto power-off function
- ◆ Battery voltage management
- ◆ Readings in percentage, degrees Celsius or Fahrenheit

H5800 is a handheld microprocessor-based device for relative-humidity measurement in air and non-aggressive gases, designed to operate with COMECO's RH probes. With the help of a Pt1000 sensor build in the RH probe, H5800 compensates probe temperature drift and indicates medium temperature. The device is equipped with a 4-digit display providing a resolution of 0.1. Two modes of operation – measurement of relative humidity and measurement of medium temperature in degrees Celsius or Fahrenheit – are available. Dew-point, absolute humidity, mixing ratio, and enthalpy can also be measured through calculation. H5800 is programmed and controlled through a folio-type keyboard providing high degree of environmental protection. The device is offered with 2 general-purpose, long-life, or rechargeable 1.5 V AA batteries and features a special automatic-battery-control function. The numerous features of H5800, along with its high accuracy and low consumption, make it a widely applicable measurement instrument.



### Technical specifications

#### Inputs

<b>RH input</b>	0...100 mV
<b>- range</b>	0...100 %RH
<b>Temperature input</b>	Pt1000 (w=1.385)
<b>- range</b>	-20...150 °C (-4...302 °F)

#### Indication and controls

<b>Digital display</b>	4-digit LCD, 13 mm
<b>Keyboard</b>	3 membrane keys

#### Accuracy

<b>RH measurement error</b>	0.1% from span
<b>Temperature measurement error</b>	0.1% from span
<b>Non-linearity</b>	negligible
<b>Temperature drift</b>	0.01% from span for 1 °C
<b>Supply-voltage influence for RH</b>	0.2% from span for 1 V
<b>Supply-voltage influence for T</b>	0.1% from span for 1 V

<sup>(1)</sup> Battery charger can be ordered separately (see 'Accessories')

#### Operating conditions

<b>Operating temperature</b>	-10...65 °C
<b>Operating humidity</b>	0...85 %RH

#### Power supply

<b>Supply voltage</b>	3 V from 2 batteries AA 1.5 V <sup>(1)</sup>
<b>Operating consumption</b>	less than 8 mA
<b>Stand-by consumption</b>	less than 1 µA
<b>Auto-power-off time</b>	0...30 min, programmable

#### Design and materials

<b>Case material</b>	plastic
<b>Probe connection</b>	4-pin snap-in connector ø8, type 'C3'
<b>Dimensions</b>	65x118x22 mm
<b>Weight</b>	max. 110 g (w/ batteries)
<b>Protection, case/socket</b>	IP44 / IP40

### Ordering code H5800 - G1

Code	Feature or option	Code values
G1	Power supply	X - none <sup>(2)</sup> , F - batteries, G - long-life batteries, H - rechargeable batteries

<sup>(2)</sup> The device is supplied without batteries