

Hygro-/Thermometer for Solids H5850

- ◆ Good accuracy at low consumption
- ◆ Operates with RHP humidity probes
- ◆ Moisture and temperature measurement
- ◆ 4-digit LCD display with mode indication
- ◆ Programmable auto power-off function
- ◆ Battery voltage management
- ◆ Readings in percentage, degrees Celsius or Fahrenheit

H5850 is a handheld microprocessor-based device for humidity measurement of solids and bulk materials, designed to operate with COMECO's RH probe model RHP. With the help of a Pt1000 sensor build in the RH probe, H5850 indicates the medium temperature too. The device is equipped with a 4-digit display providing a resolution of 0.1. Three modes of operation – measurement of moisture content, measurement of relative humidity, and measurement of medium temperature in degrees Celsius or Fahrenheit – are available. H5850 can be programmed and controlled through a folio-type keyboard providing high degree of environmental protection. The device is powered by 2 alkaline or rechargeable 1.5 V AA batteries and features a special automatic-battery-control function. The numerous features of H5850, along with its high accuracy and low consumption, make it a useful instrument for bulk-material moisture measurement.



Technical specifications

Inputs

Humidity input	from RHP probe
- moisture-content range	0...300 %
- relative-humidity range	0...75 %
Temperature input	Pt1000 (w=1.385)
- range	-20...150 °C (-4...302 °F)

Indication and controls

Digital display	4-digit LCD, 13 mm
Keyboard	3 membrane keys

Accuracy

Humidity measurement error	0.2% from span
Temperature measurement error	0.1% from span
Non-linearity	negligible
Temperature drift	0.01% from span for 1 °C
Supply-voltage influence for humidity	0.2% from span for 1 V
Supply-voltage influence for T	0.1% from span for 1 V

⁽¹⁾ Not included

Operating conditions

Ambient temperature	-10...65 °C
Ambient humidity	0...85 %RH

Power supply

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

Design and materials

Case material	plastic
Probe connection	4-pin snap-in connector ø8, type 'C3'
Dimensions	65x118x22 mm
Weight	max. 110 g (w/ batteries)
Protection, case/socket	IP44 / IP20

Ordering code H5850