

HYGROPIN MOISTURE METER



To identify and monitor moisture in concrete

The **Hygropin moisture** meter is the solution to identify, **test and monitor moisture in concrete**. Due to the small and fast moisture sensors of the humidity meter, it is possible to diagnose moisture according to **ASTM F2170-09** quicker and easier than ever before. The relative humidity test requires placing a measuring sleeve at a specific depth.

This can be done either by drilling a hole or by pre-installing cast holes in fresh concrete.

The Hygropin provides the smallest available sensor on the market, minimizing damage to the surface and greatly reducing the installation efforts required to obtain accurate **sub-surface moisture readings**.

The device features **two independent sensor channels**, which can measure ambient and concrete characteristics simultaneously. It also contains an integrated sensor with only 5 mm of diameter.

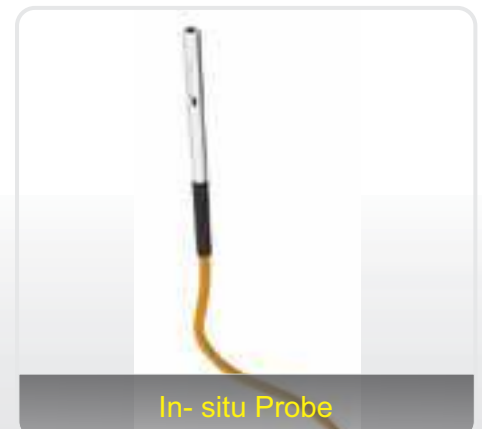


Features :

- . Depending on the settings this moisture meter is able to **display relative humidity, temperature** and calculated **psychrometric parameters**
- . The two independent sensors channels of the moisture meter can measure ambient and concrete characteristics simultaneously
- . Measuring relative humidity temperature, dew frost point etc. 0 to 100% RH/ -40 to +85deg. Celsius
- . High accuracy with fast measuring time
- . Highly integrated sensor with only 5 mm / 0.3" diameter
- . Moisture meter shows trend indicators for each parameter
- . Stainless steel housing of the sensor for long lasting performance in rough environments
- . Can record data over a period of time for traceable information

In – situ probe :

In-situ probe: Highly integrated temperature and humidity probes which combine accuracy, wide measuring range and long term stability. The stainless housing fits perfectly to the rough environment on the construction site. Probe and instrument are connected with a 2m cable.



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Measurement of Moisture in Concrete

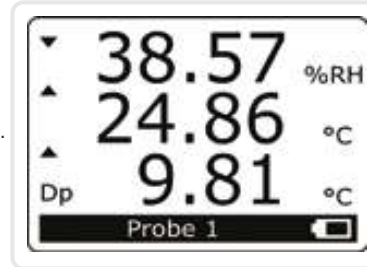
The moisture content inside the concrete is different to that on the surface. Surface based testing methods only measure up to 20mm (3/4") at best and don't necessarily reflect reality. Therefore, the hygropin uses the in-situ technology which identifies the actual moisture content inside the concrete.

What percentage of relative humidity is acceptable in an interior concrete floor slab? Tolerable RH level using in-situ probes have been established and the flooring manufactures release recommendations depending on their products.

User Interface :

Depending on the setting the Hygropin is able to display:

- Relative humidity and temperature measured by two probes
- Calculate psychrometric parameters like dew/frost point etc. for both probes
- Difference between the values measured by the two probes
- Trend indicator for each parameter.



Technical Specifications :

Display Unit of the Moisture Meter	
Battery	9 V alkaline
Mains	Via USB charger
Probe input	Two separate inputs
Real time Clock	Yes
Psychrometric Calculations	Yes
Start up time	3s
Data refresh rate	1s
Interface type	USB
Data logging/Data capture	
Memory	Max.10000 readings
Logging interval	5 s to 1 h
Display	
Display	Pixel graphic LCD, backlighted
Display modes	% RH and temperature, date and time % RH, temperature, calculated parameter
Mechanical	
Dimension	270 x 70 x 30 mm (10.63 x 2.76 x 1.17")
Weight	198g
IP classification	IP 40
Environment conditions	
Operating temperature	-10°C to 60 °C (14°F to 140°F)
Humidity	0 to 100% RH , no condensing
In-situ probe of the Moisture Meter	
Measuring range	0 to 100% RH - 40 °C to 85 °C (- 40 °F to 185 °F)
Accuracy	± 1.5 % RH / ± 0.3 K
Response time	<15s
Dimension	Ø 5 mm (Ø 0.2")
Cable length	200 cm (79")
Maximum air velocity	20m/s (3,935 ft/min)

Product Supply includes: Hygropin moisture meter, **In situ probe**, carrying case,

10pcs measuring sleeves, USB cable, CD including Hygro link.

Item Code: 780 10 000



Drilled Holes



Measuring Sleeve :

An 8mm (5/16") hole in the concrete is enough to place the sleeve. The **re-closeable silicon cap** seats the hole and **liner air tight**.

Cast Holes



Add-on for Wet Concrete (Optional) :

Together with the measuring sleeve the add-on for wet concrete allows pre-installation of cast holes in fresh concrete. A rod placed inside the sleeve will exclude the fresh concrete from entering the liner. As soon as the concrete hardens the rod can be replaced with the in-situ probe to track the relative humidity during curing.