

GE Infrastructure Sensing

The GE Protimeter Hygrohawk is a unique instrument that can be used for spot measurements of humidity and temperature and as a data logger for monitoring humidity and temperature trends. It is a versatile tool ideally suited for professionals involved in the following industries:

- Disaster restoration
- Building survey/home inspection
- Dampness diagnosis in buildings
- Flooring installation
- Specialty coating applications

Functions and Features

The measurements that can be displayed on the HygroHawk are:

- Relative humidity
- Air temperature
- Dew point temperature
- Mixing ratio/absolute humidity/grains per pound
- Surface temperature (optional sensor)
- Surface and dew point temperature difference
- Fast response time

Relative humidity and air temperature values are displayed simultaneously when switching the HygroHawk on. Dew point and mixing ratio/absolute humidity are displayed at the touch of a button. An optional surface temperature probe is required to display surface temperature and temperature difference measurements.

HygroHawk™ Protimeter Moisture Meter

HygroHawk is a GE Protimeter product. GE Protimeter has joined other GE high-technology sensing businesses under a new name—GE Infrastructure Sensing.



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Data Logging Functions

When concise and accurate environmental readings need to be reported, the HygroHawk is the ideal instrument. The ability to record readings instantly at the push of a button or leave the instrument in place over a period of time makes this instrument ideal for many applications including:

- Fire and flood restoration
- Concrete floor moisture measurement
- Indoor air quality
- Environmental health

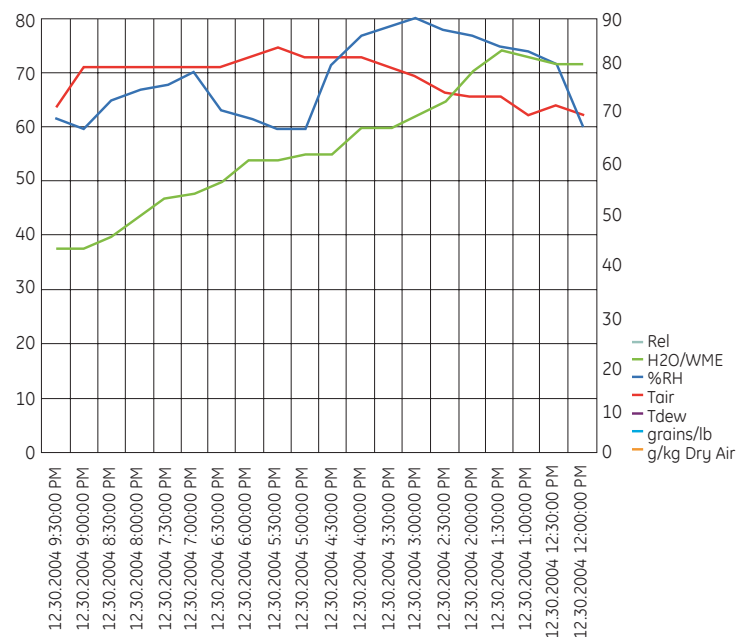
The HygroHawk can be set to record measurements over time. The data logger can be set and activated from the instrument buttons or from a PC. Measurements can be saved and displayed in tabular and graphical form. The user selects four data logging parameters listed below:

- Logging interval: 1 minute to 24 hours
- Delayed start logging: 1 minute to 24 hours
- Number of logs: maximum of 398 records
- Job number: range from 1 to 15

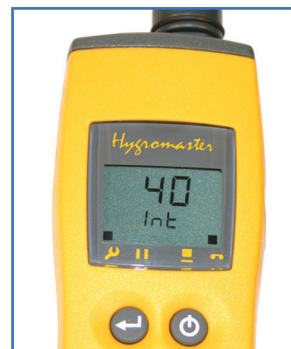
Reporting the successful drying of a building after a flood is an essential requirement of the insurance industry. The HygroHawk will allow you to record the whole job and print out the results easily and quickly. Recordings can be made from the outputs of de-humidifiers and the HygroHawk will even calculate the grains per pound for you. If you have several concurrent jobs the HygroHawk allows you to set up to 20 different job numbers.



Assign job numbers to data



Automatic graphing—windows based PC.



Set interval 1 minute to 24 hours

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Humidity Probe Options

The HygroHawk may be used with two styles of interchangeable humidity probe, the Hygrostick™ and the Humistick™.

The smaller Hygrostick has a measurement of 20% to 100% RH. The Humistick measurement range is 0% to 100% RH. The Hygrostick is used for high moisture applications such as concrete floors ASTM F2170-02.



Concrete Floor Moisture Measurement

ASTM F2170-02 is the new test method for equilibrium relative humidity directly in concrete slabs. GE pioneered this more accurate method, which includes drilling holes in the concrete, inserting a humidity sleeve and measuring the actual equilibrium humidity in the concrete. If excessive moisture is found, one simply replaces the sleeve cap for future retesting. This method also permits normal construction without disturbing the test surface.

A small hole is drilled in the concrete. Next, a humidity sleeve is inserted and capped flush with the floor. The relative humidity of the air in the test hole is now at the same moisture level as the concrete around it. Flooring product manufacturers normally recommend RH readings between 75% and 85% depending on the permeability of the product being installed. See ASTM F2170-02 for exact test procedure.

Readings from multiple Hygrosticks can be taken and recorded with ease. If its long term measurements you need simply set the logging start, stop and interval times and leave the instrument in place.

Humidity readings can be taken with the use of humidity sleeves or humidity box.



HygroHawk Specifications

Product

Protimeter HygroHawk

Part Number

BLD7702

Standard Supply

Hand-held HygroHawk with data logging software and cable. Humistick humidity sensor, velcro pouch and instructions.

Optional Accessories

Surface temperature sensor

BLD4701

Hygrostick/Humistick extension lead

BLD5802

Hygrostick

BLD4750

Five pack Hygrostick

BLD4750C

NIST traceable calibration certificates available

Measurement Range and Uncertainty

Hygrostick

20% to 100% RH, $\pm 2.5\%$ RH at 20°C to 30°C (68°F to 86°F), 0°C to 50°C (32°C to 122°C) $\pm 0.3^\circ\text{C}$



Humistick

0% to 10% RH, $\pm 3\%$ RH at 20°C to 30°C (68°F to 86°F),
10% to 90% RH, $\pm 2\%$ RH at 20°C to 30°C (68°F to 86°F),
90% to 100% RH, $\pm 3\%$ RH at 20°C to 30°C (68°F to 86°F),
0°C to 50°C $\pm 0.3^\circ\text{C}$

Dimensions

7 in x 1 1/4 in x 2 in (175 mm x 30 mm x 48 mm)

Batteries

LR6 AA x2

Weight

4 oz (100 g)



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