

elcometer® **116 Whirling and Sling Hygrometer**

Can be used in accordance with : **ASTM E 337-B and BS 2842**



The Whirling Hygrometer employs the wet and dry bulb principle to determine the relative humidity of the atmosphere. The instrument consists of wet and dry bulb thermometers mounted side by side in a frame with spindle and handle attached.

The **Elcometer 116A** (Spirit) Whirling Hygrometers are available in °C scales.

A guide for Relative Humidity (RH) Calculation is supplied with each instrument. The dewpoint can be accurately obtained using the Elcometer 114 Dewpoint Calculator (See below)

The **Elcometer 116C** Bacharach Sling Hygrometer is a convenient, self contained instrument with a built in slide rule for the calculation of %RH and dewpoint. It has spirit filled thermometers and is also available in °C scales.

Features

- Requires no batteries – manual operation
- Light and very portable
- Low Cost



Test Method and Operation

Hygrometers use a manual technique to measure Relative Humidity (RH) and dewpoint.

These instruments consist of two thermometers, the bulb of one being covered by a wick. The wick is saturated by filling the plastic container with water. Hold the Hygrometer by the handle and whirl through 360° facing the wind or any airflow for about 90 seconds. This is repeated until the wet bulb thermometer cools down to a constant frame temperature and two consecutive pairs of readings agree.

The RH and dewpoint are then calculated from the wet and dry bulb temperature readings using the Dew Point Table or the Elcometer 114 Dewpoint Calculator. Ensure the wet bulb wick dips into the small water container attached to the Hygrometer frame. Check the water level each time before using.

Specifications

Measurement Range	-5 to 50°C
Relative Humidity Accuracy	±5% RH
Dimensions :	230 x 145 x 30 mm
Weight :	250 g in Carton

Shipping List

- Elcometer 116A or Elcometer 116B
- %RH Guide
- Operating Instructions
- 3 Spare Wicks

elcometer® **114 Dewpoint Calculator**



This provides accurate values of Relative Humidity (RH) and dewpoint from the wet and dry bulb temperatures of a Whirling or Sling Hygrometer - such as the Elcometer 116 range.

The range of the Elcometer 114 is -10°C to 50 °C and it has an accuracy of ±1% of standard tables.

The calculator includes a °C to °F converter