

Heat Transfer



DEW POINT HYGROMETER H813



Year 1 study

Features

- Direct Measurement of Ambient Dew Point
- Allows Sampling of Air From Remote Locations e.g. Air Ducts
- Rapid Operation and Reversibility. Allows Repeat Measurements by many Students
- Electrically Driven. No Flammable Solvents Required for Operation

Description

A circular polished and chrome plated mirror is enclosed on one face by a cylindrical tube with a clear window. Air is drawn into the enclosure by an small air pump either from the surrounding ambient or from another source.

The mirror is cooled electronically and its temperature is recorded by a close tolerance thermometer located at its geometric centre. The operator controls the rate of cooling by pressing a switch on the unit. The temperature at which mist is seen on the mirror is the dew point and this temperature is recorded by the operator. A second identical thermometer for recording the dry bulb temperature is also supplied. These two values allow either direct calculation of the air condition or determination of the air condition from the charts supplied.

As the mirror is electrically cooled, unlike the more traditional evaporative instruments, the process is quickly reversible allowing repeated measurements thereby maintaining a high degree of student interest.

Related laws

- Thermodynamics
- Heat Transfer
- Chemical Engineering
- Mechanical Engineering

sales@p-a-hilton.co.uk 01794 388 382 P A Hilton Ltd, Horsebridge Mill, Kings Somborne, Stockbridge, Hampshire. SO20 6PX



- Plant and Process Engineering
- Refrigeration
- Air Conditioning

Learning capabilities

- Measurement of ambient dew point using the chilled mirror method
- Measurement of dew point of air sampled from an air duct or other source

What's in the Box?

- 1 x H813
- 1 x DC power supply
- 1 x Power lead
- 1 x Air pump
- 4 x Thermometer (2 x spare)
- 1 2m Plastic tube
- Instruction manual
- Packing List
- Test Sheet

You might also like

• H814

Weights & Dimensions

- Weight: 0.2 kg
- Length: 60mm
- Width: 120mm
- Height: 75mm

Essential Services

- 10W 220-240 Volts
- Single Phase
- 50Hz (With earth/ground)
- 10W 110-120 Volts
- Single Phase
- 60Hz (With earth/ground)

Ordering information

To order this product, please call PA Hilton quoting the following codes: H813/230

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure. Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited. COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 2 YEARS

H813/115