

Model 645

Handheld Relative Humidity and Dew/Frost Point Hygrometer

The Edgetech Instruments Model 645 offers the new modular system approach allowing you to purchase the instrument that currently meets your requirements yet upgrade at a later time to meet your future measuring needs. Its modular design allows easy upgrades to the instrument. You will always have a measuring instrument corresponding to the latest technology.

The Model 645 incorporates a 1% maintenance free humidity probe ideal for checking humidity measurements for validation of critical environments. The hygrometer is rugged, compact and protected by a waterproof plastic housing. The humidity measuring range is 0 to 100% RH with an accuracy of $\pm 1\%$ RH over the range of 10-90%, $\pm 2\%$ over the remaining range. The accuracy of this probe has been tested and proven time and again in worldwide laboratory tests. The probe is equipped with a patented RH sensor.

Edgetech Instruments' services are performed in the USA at their modern, well-staffed, ISO/IEC 17025:2005 accredited, ISO 9001:2015 registered manufacturing facility. All recertifications and calibrations are traceable to NIST.

Different Model 645 humidity and dew point probes are available for industrial applications:

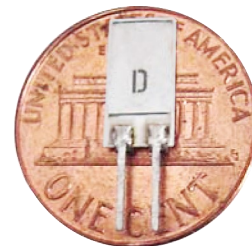
- Humidity measurements at up to 180°C in drying systems.
- Precise dew/frost point probes with quick disconnect.
- Recognizes condensate thus preventing damage to the compressed air system.
- Measures equilibrium moisture (e.g. in bulky material).

Features:

- Highest precision $\pm 1\%$ RH
- Housing with LED display
- Internal data memory
- Convenient data analysis
- Extensive probe range
- Displays these parameters at the touch of a button:
 - Temperature
 - Relative Humidity
 - Absolute Humidity
 - Dew/Frost Point
 - Enthalpy



The Model 645



The Model 645 Sensor

 **Edgetech Instruments**

ISO 9001:2015 Registered

ISO/IEC 17025:2005 Accredited

Technical Specifications

HUMIDITY

Measuring Range:

- 0 to 100% RH

Resolution:

- 0.1 % RH

System Accuracy:

- $\pm 1\%$, 10 - 90% RH, $\pm 2\%$ remaining range

DEW/FROST POINT

Accuracy:

- $\pm 2.0^{\circ}\text{C}$ (3.6°F) at -20°C (-4°F), nominal

TEMPERATURE

Measuring Range:

- -50 to 150°C (-58 to 302°F)

Response Time:

- <12 seconds @ 400 fpm

Resolution:

- 0.1°C

Accuracy of Instrument:

- $\pm 0.2^{\circ}\text{C}$ ($.36^{\circ}\text{F}$) -25 to 75°C , (-13 to 167°F)
- $\pm 0.4^{\circ}\text{C}$ ($.72^{\circ}\text{F}$) remaining range

System Accuracy:

- Up to $\pm 0.23^{\circ}\text{C}$

GENERAL

Typical Battery Life:

- 9V PP3 (Al-Mn). 20-45hr

Weight:

- 0.56lb. (255 g) including battery

Storage/Transport Temperature:

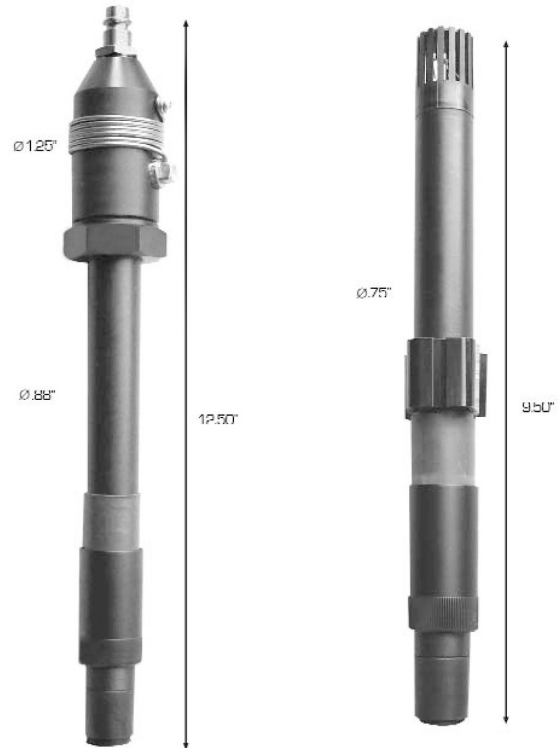
- -20°C to 70°C (-4°F to 158°F)

Housing:

- ABS

Operating Temperature:

- 0°C to 50°C (32°F to 122°F)



Model 645 Probes

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