

DT30 Chilled Mirror Hygrometer



Figure 1: DT30 Electronics

FEATURES

- Isolated stainless-steel sensor cavity
- Precision Accuracy
- Two 4-20mA outputs (configurable)
- RS232 programmable
- Two-line display
- Tabletop sensor mounting
- Automatic balancing function (ARC)
- Flip top lid for easy cleaning
- Dew points to -60C at 25C

APPLICATIONS

- CALIBRATION LABS
- CLEAN ROOMS
- ENVIRONMENTAL CHAMBERS
- PHARMACEUTICAL
- INDUSTRIAL PROCESSES
- GLOVEBOX APPLICATIONS
- SEMICONDUCTOR MFG
- DATA STORAGE



Figure 3: DT30-F chilled mirror sensor

Figure 2: DT30-F

The DT30

The DT30 (patented technology) is a precision chilled mirror hygrometer that provides quick and accurate measurements of dew point, air temperature, and humidity measurements. The hygrometer is configured as a tabletop mount for flow through applications. It's isolated stainless-steel sensor cavity and its nickel plated mirror makes it highly resistance to corrosion. User selectable, depending on options, unit displays (3 parameters) Dew Point (DP). Air temperature (T) and Relative Humidity (RH). The unit offers stable, accurate and repeatable measurements that are traceable to ISO17025.

DT30 Chilled Mirror Hygrometer



Measurement Ranges	Dew Point: -60 °C to +25C at 30C; (non-condensing) Relative Humidity: 5-95% (non-condensing) Temperature: -20 °C to +95°C (remote configuration)
Display	2x16 LCD Display, Shows three user selectable parameters.
Reproducibility	+/- 0.05°C
Resolution	0.01 %
Output	(2) 4-20mA or RS232
Cable Length	2ft from sensor to electronics Contact factory for custom lengths. (For remote versions only).
Supply Voltage	12Vdc +/-10% @ 4A
Pressure	1barg/14.5psig
Analog Output scaled range Dew Point (4-20mA) User Selectable	-60°C to +40 °C (Factory set)
Operating Temperature	-20 °C to +60 °C (Wall mount units)
Weight	< 5lbs.
Hysteresis	none
Sample Flow Rate	1-3 scfh
Enclosure Rating	IP65 with AT option
Communications	RS232 Programmable
Accuracy	Dew point +/-0.2C Air Temperature +/-0.2C RH +/-1.0% (0-80%), +/-1.5 (>80% to 95%)
Wetted Parts	stainless steel, nickel, glass

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Technical Information

Ordering Table

DT30-F	Flow Through Chilled Mirror Hygrometer
DT30-W	Wall mount Chilled Mirror Hygrometer
T-100 (optional)	Air temperature probe with 10 ft cable

Note: Custom cable lengths and configurations are available. Contact factory with any questions.

Additional Options:

Part Number

Description

SVS

Sampling vacuum system, for atmospheric or vacuum applications.