

# Dewtran® -HB Series

## Heated Chilled Mirror Hygrometer



### FEATURES

- Heated Dewpoint System
- Suited to measure elevated dew points up 95°C non-condensing environments.
- 10ft Heated Hose
- The unit includes a heated stainless- steel sintered filter
- RS232 programmable
- Filter particles down to 7 microns
- Filter element is easy to remove and clean.
- ARC Cycle (balancing the optical signal of sensor)
- RS232-bidirectional.
- NIST Traceable Calibration.

### APPLICATIONS

- HEAT TREATING
- AEROSPACE
- COMBUSTION GAS
- PHARMACEUTICAL
- INDUSTRIAL PROCESSES
- IN LINE ENGINE MONITORING
- FURNACE MONITORING
- RUBBER/PLASTIC PELLET DRYERS
- INDUSTRIAL GAS
- POWER GENERATION



## The DewTran® -HB Series

The DewTran®-HB is a temperature controlled 2 stage chilled mirror hygrometer suited to measure elevated dew points up 95°C non- condensing environments. Dew point measurement range from -30C to 95C. The chilled mirror uses a fundamental principle to accurately measure the dew point/frost point in a gas sample. It is typically used a reference standard for dew point over the measurement range. It is very responsive and repeatable to +/- 0.05°C and easy to maintain.

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### Technical Information

<b>Measurement Ranges</b>	Dew Point -30°C to 90°C (Depending on ambient conditions)
<b>Technology</b>	chilled mirror, 2 stage TEC
<b>Repeatability</b>	+/- 0.05°C
<b>Resolution</b>	0.01 %
<b>Internal Heated Temperature Range</b>	Ambient to 99°C (77 to 210°F) temperature range settable
<b>Signal Output</b>	4 -20 mA, 0-5Vdc or 0-10Vdc
<b>Pressure</b>	Max 4.5 bar
<b>Alarm</b>	2 NC/SPDT 1 form C-0.5A 120/240Vac
<b>Output</b>	RS232 programmable Power/signal connection: M12 connector with 6ft cable (included)
<b>Supply Voltage</b>	90-265Vac
<b>Sample Flow</b>	0.5 to 3 SCFH (0.25 to 1.42 l/m)
<b>Communication</b>	RS232 bi-directional
<b>Sensor Element</b>	1/3 Class A Din, 100 ohms 0°C (32°F)
<b>Operating Temperature</b>	0°C to 60°C
<b>Housing</b>	IP65 Enclosure
<b>Weight</b>	10lbs.
<b>Filter</b>	SS sinter filter, 7 microns
<b>Dimensions</b>	10.5" * 8.25" * 10"
<b>Accuracy</b>	+/- 0.2°C (+/-0.36° F).
<b>Connection</b>	¼" compression
<b>Display</b>	2-line LCD Display

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Ordering Table (More configurations available upon request)

**Model Types: DewTran-HB**

**Note: DewTran®-HB models come with power cord**

Ordering Options	
DT-HB	Dewtran heated box chilled mirror hygrometer



Figure 1: Dewtran-HB Side View