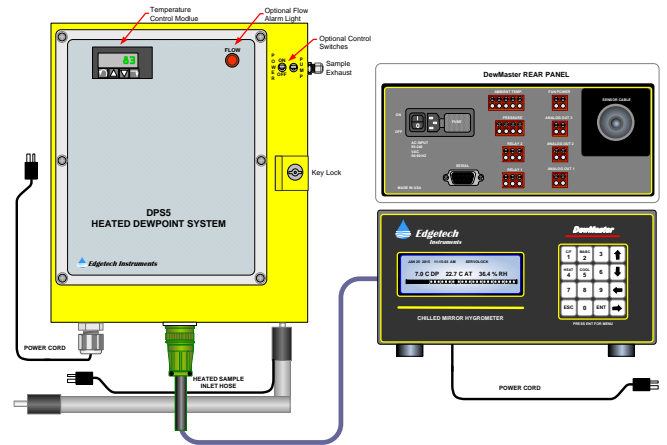


## ***DPS5 – Heated Dew Point Chilled Mirror Hygrometer featuring the DewMaster***

**Application:** The DPS5 is a heated hygrometer that is used to measure the moisture content of gases when the dew point temperature is greater than the ambient temperature. The sampling system is heated to prevent condensation of vapors into liquids thus preventing normal operation. The DPS5 is a special application chilled mirror hygrometer designed for use with higher temperature applications where a high definition display, field programmability and options such as pressure measurement, conversion of dew point to PPMv, or adjustment of analog/ digital setpoints is required. The DPS5 with pressure transducer can measure and display sample pressure at the sensor and can also be configured to display dew point in PPMv, Grains/ Lb or Grains / Kg. Applications include Furnace, Plastic Blow Molding, Heat Treat, Compressed Air Systems (before after cooler), engine exhaust, Nuclear fuel rod processing, and fluidized beds.



The **Model DPS5** is a Precision High Temperature Heated Dew Point System consisting of a heated sampling package plus a separate Deluxe DewMaster Hygrometer. The DewMaster is connected to the sensor via a 10' signal cable. The deluxe hygrometer is complete with Automatic Balance Cycle (ABC), Programmable Balance Cycle (PABC), Manual Balance Cycle (MABC), real time clock w/date, measurements in °C or °F, scalable voltage and current outputs, RS232, two programmable alarms, and Control Servo for Mirror temperature overrides (Heat and Cool), An optional pressure transducer is available to provide display of sample pressure along with display of Dew Point in degrees C or F and PPMv. You can also program the DewMaster to display in other Psychrometric values such as Grains/ Lb or Grains / Kg. The DPS5 measures the dew point of heated sample gas. The heated sampling package is provided with temperature control and is adjustable at the temperature control module located on the plastic enclosure door. The temperature controller ensures the sampled gas remains hot to prevent condensation during measurement. The standard system features the **HTS2 sensor with aluminum body** and is designed with capability to measure high dew points up to 95°C / 203°F. An optional **HTX3** chemically resistant chilled mirror sensor is available for measurement in aggressive chemical background gasses. The system includes an Integrated flow meter (0.5 to 5scfh), Industrial duty terminal block for easy electrical installation, filter, and **3 foot heated sample input hose**. The system can be configured to monitor sample flow conditions. The standard HTS2 configuration is set up for measuring a non-corrosive, positive pressure sample gas. An optional vacuum pump may be selected for extraction from atmospheric pressure process points.

**Sensors:** The standard system features the **HTS2 2-stage chilled mirror sensor with aluminum body** and is designed with capability to measure dew points up to 95°C / 203°F (depression range of 60°C). You can also choose the **HTS3 three stage chilled mirror sensor with aluminum body** or the **HTX3** chemically resistant – SS body chilled mirror sensor. Both models offer a depression range of 95°C. The HTX3 is designed for measurement in aggressive chemical background gasses.

**Options:** The standard system is available with many options depending on the application requirements

1. **Flow Switch** may be added to detect loss of sample flow. It is available as a SPST dry contact or can be ordered to provide a local RED Lamp when loss of flow is detected.
2. **Vacuum Pump** is available to provide sample extraction from non-pressurized systems. An ON-OFF power switch is provided when the pump is ordered.
3. **CART** System is mounted on a cart to allow you to share the system at many points.

4. **DA** Adds a Second Alarm relay which is usually configured for "Clean Mirror" notice
5. **RS** Adds the option board to provide RS232 output
6. **TAG** SS tag attached to the unit. Laser Etched, 2 lines- customer provided info
7. The standard unit includes a **heated sample hose**. The standard length is 3 feet (1m) but optional lengths are available. It will follow the power configuration of the main system: 110 or 220 VAC unless the UNIVAC option is chosen. In this case, it is powered by the main analyzer control module which always converts to 110 vac.

**Notes:**

1. The temperature controller is adjustable and should be set to 5° warmer than the sampled gas.
2. The HTS Sensors are aluminum construction and are appropriate for most non-aggressive background gases. The X3 sensor is SS Construction.
3. An optional flow switch may be added to detect loss of sample flow. It is available as a SPST dry contact or can be ordered to provide a local RED Lamp when loss of flow is detected.
4. The optional vacuum pump is available to provide sample extraction from non-pressurized systems.
5. The standard DPS5 is configured for 1-100 psig sample pressure operation.
6. Adjustment of the sample flow meter may be required during initial set up of the DPS4 to your process.
7. An optional pressure transducer and will display pressure at the sensor as well as offer dew point measurement in degrees C or F plus a secondary display in PPMv.
8. The DPS5 series sampling package comes with standard power configurations as 110 or 220 VAC as specified in your order. For universal power input option (110 or 220 VAC) please inquire. The DewMaster is universal power (90-250 VAC ).
9. Adjustment of the sample flow meter may be required during initial set up of the DPS5 to your process.

**TO ORDER THE DPS5:**

1. [Select Sensor/ Mirror](#)- HTS2x or HTX3 or HTX3
2. [Select Heated Sampler Power](#)- 110 or 220 VAC
3. [Select Options](#) such as Vacuum Pump
4. [If ordering the pressure transducer option, then identify Range](#) 0-5, 0-25, 0-250 PSI
5. [List as separate line items](#) : Accessories, Calibration Packages, ...

**DPS5-**  -  -  -   
 Sensor/ Mirror                  Sampler Voltage                  OPTIONS                  PRESSURE

**For Ex:** **DPS5 - HTS2SS - 110 - VPH -**  
**\$7,268 + \$2450 + \$0 + \$550 = \$10,268 for a DPS5-HTS2SS-110-VPH**  
*Base Price*

**1. [Select Sensor/ Mirror:](#) HTS2 or HTS3 or HTX3**

Chilled Mirror Selection			Mirror Adder \$		
			Depression	STD	ENH
HTS2	Two Stage, Al Body, Convection Air Cooled- No Fans, Flow Thru Sampling	60°C	\$2,200	\$2450	\$2640
HTS3	Three Stage, AL Body, Convection Air Cooled- No Fans, Flow Thru Sampling	70°C	\$5,198	\$5,448	\$5,638
X3	3 Stage, Panel Mount, SS Body, Convection Air Cooled- No Fans, Flow Thru	65°C	\$5,500	\$5,750	\$5,940

Applications CM Configuration	General Purpose Gases	Acids	Caustics	Salts	Organics	Nuclear Application	High Temperature
STD: Standard Chrome	A	D	D	C	C	D	C
ENH: Enhanced SS	A	B	B	B	B	C	B
MAX: Platinum	A	A	A	A	A	A	A

<b>A</b>	Excellent	<b>C</b>	Good
<b>B</b>	Very Good	<b>B</b>	Very Good

**STEP 2: SELECT HEATED SAMPLER VOLTAGE: 110 OR 220 VAC50/60HZ**

**STEP 3: SELECT OPTIONS:**

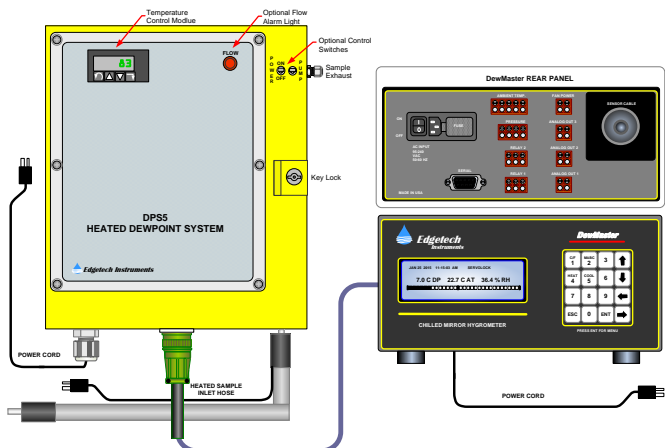
-VPH	Vacuum Pump, includes power switch for pump	\$ 550.00
-FS	SS Sample Flow Switch, provides SPST dry contact of loss of flow, Normally Open	\$ 250.00
-FSL	Sample Flow Switch and Lamp	\$ 350.00
-CART	System mounted on a cart	\$ 1,500.00
-PTDM	Pressure Transducer, 0 to 25PSIA or 0-150PSIA, or 0-300PSIA	\$ 1,485.00
-FIL	Filter kit: includes 1/4T compression fittings and additional elements; rated for 0.1 micron particulate	\$ 165.00
-DX	Additional box of elements. Qty. 3	\$ 83.00

**LIST ACCESSORIES / SPARE PARTS/ SERVICES AS SEPARATE LINE ITEMS:**

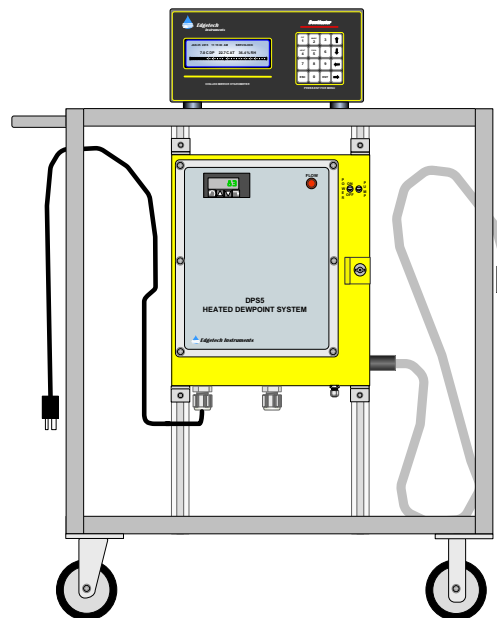
HTUBE-TF-1/4-3-115	Heated 1/4 inch Teflon Tubing, 3 feet long, 115 VAC-21 Watts	\$ 400.00
HTUBE-TF-1/4-10-115	Heated 1/4 inch Teflon Tubing, 10 feet long, 115 VAC-70 Watts	\$ 700.00
HTUBE-TF-1/4-15-115	Heated 1/4 inch Teflon Tubing, 15 feet long, 115 VAC-105 Watts	\$ 950.00
HTUBE-TF-1/4-3-230	Heated 1/4 inch Teflon Tubing, 3 feet long, 230 VAC-84 Watts	\$ 450.00
HTUBE-TF-1/4-10-230	Heated 1/4 inch Teflon Tubing, 10 feet long, 230 VAC-280 Watts	\$ 750.00
HTUBE-TF-1/4-15-230	Heated 1/4 inch Teflon Tubing, 15 feet long, 2230 VAC-420 Watts	\$ 1,000.00

**Extended Warranty/Calibration Options: Please list as separate line items:**

3EXTW	3 Year Extended Warranty includes repairs covered in the warranty statement	10% of TOTAL PRICE
3YNIST1P	3 NIST Traceable Calibrations for the price of 2 (1 Parameter)	\$ 1,210.00



Standard Wall Mount with DewMaster



Cart Mounted System