

# DPS SERIES

## Heated Dew Point Systems



**DPS1** and **DPS2** are a series of heated dew point hygrometers that can measure dew points up to 95°C (203°F) and as low as -35°C (-31°F). These integrated systems include micro-processor based electronics, a chilled mirror dew point sensor, a sample flow meter/valve, a 3 foot heated sample line, assorted tubing and fittings all contained in a heated, temperature controlled NEMA-4 enclosure.



### **DPS1**

*Operating temperature range:*  
0 to 105°C (32 to 221°F)

*Dew Point measuring range:*  
-35°C to 95°C (-31 to 203°F)

### **DPS2**

*Operating temperature range:*  
0 to 50°C (32 to 122°F)

*Dew Point measuring range:*  
-35°C to 45°C (-31 to 113°F)

### **DPS Standard Features**

- ▶ Power: 90-260VAC., 50- 400Hz, 40 watts
- ▶ Microprocessor controlled
- ▶ Eight digit alphanumeric LED display
- ▶ In line filter
- ▶ 3 foot heated hose
- ▶ User programmable temperature controller
- ▶ Automatic Balance control
- ▶ Alarm relay, form C
- ▶ Outputs 4-20mA
- ▶ Sample connection: ¼ female compression tube fitting
- ▶ Sample pressure: 0 to 150 psig max
- ▶ Measurement Accuracy: +/-0.25C (+/-0.45F)

### **Applications**

- ▶ Fuel cell testing
- ▶ Industrial
- ▶ Furnance

## PHYSICAL

|                    |                              |
|--------------------|------------------------------|
| <b>DPS1</b>        |                              |
| <b>Dimensions:</b> | 24" x 16" x 6"               |
| <b>Weight:</b>     | 32lbs                        |
| <b>Mounting:</b>   | Wall mounted Nema 4 standard |
| <b>DPS2</b>        |                              |
| <b>Dimensions:</b> | 14" x 12" x 6"               |
| <b>Weight:</b>     | 15lbs                        |
| <b>Mounting:</b>   | Wall mounted Nema 4 standard |

## FUNCTIONALITY

|                         |                                    |
|-------------------------|------------------------------------|
| <b>Mirror Material</b>  |                                    |
| <b>Standard:</b>        | Chrome                             |
| <b>Optional:</b>        | Platinum                           |
| <b>Pressure Rating:</b> | 300psi                             |
| <b>Sample Flow:</b>     | 0.5 to 5.0 SCFH (0.25 to 2.5L/min) |
| <b>Repeatability:</b>   | +/- 0.05°C (0.9°F)                 |

## OPTIONS

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| <b>VP</b>    | Vacuum pump 115Vac or 230Vac rated up to 122F/50C               |
| <b>VPH</b>   | Vacuum pump 115Vac or 230Vac rated up to 212F/100C              |
| <b>PT</b>    | Pressure transducer kit, live pressure                          |
| <b>RS</b>    | RS232 output                                                    |
| <b>SA/.1</b> | Enhanced dew point accuracy, 0.1C traceable to NIST (Certified) |

## CHILLED MIRROR DEW POINT SENSORS (Required)

### S-type

|           |                                                                |
|-----------|----------------------------------------------------------------|
| <b>S1</b> | Single stage thermo electric cooler (TEC), flow through sensor |
| <b>S2</b> | Two stage (TEC), flowthrough sensor                            |

### Depression @25°C (77°F)

|              |
|--------------|
| 45°C (113°F) |
| 65°C (149°F) |

