# Gill Multi-Plate Radiation Shield and Sensors

The WS-41003 Gill Multi-Plate Radiation Shield protects temperature and humidity sensors from error-producing precipitation and solar radiation. The multiple discs have a unique profile that blocks direct and reflected solar radiation yet permits easy passage of air. The disc material is especially formulated for high reflectivity, low thermal conductivity and maximum weather resistance.

The model WS-41003 contains a universal adaptor to securely hold sensors up to 16 mm in diameter. The model WS-41003P uses a a special mounting adaptor that can be custom sized to fit any sensor to 26 mm. The required diameter is specified at the time of ordering.

A Pt1000 (1000 $\Omega$  RTD) temperature probe is available for use in the radiation shield. It is encased in a stainless steel protective sheath and securely mounted in a convenient junction box that fits the WS-41003 radiation shields. The temperature probe is available with 4-20mA or 0-1VDC analog outputs.

The relative humidity/temperature probe combines a high accuracy capacitive polymer humidity sensor with a Pt1000 temperature sensor. The sensors are mounted in a common junction box and are available with 4-20mA or 0-1VDC analog outputs.

## **Ordering Information**

Gill Multi-Plate Radiation Shield WS-41003 includes universal adaptor for sensors up to 10 mm diameter

Gill Multi-Plate Radiation Shield WS-41003P with custom sensor adaptor - specify diameter 10 - 26 mm

Temperature Probe - RTD output WS-41342 4-20mA out WS-41342L\* 0-1VDC out WS-41342V\*

Relative Humidity/Temperature Probe 4-20mA out WS-41382L\* 0-1VDC out WS-41382V\* \* Specify Temperature Scaling -50 °C to +50 °C Add suffix C -50 °F to +150 °F Add suffix F

For example: WS-413C2LC specifies a temperature/humidity sensor with 4-20mA output and scaled for -50  $^\circ$ C to +50  $^\circ$ C



#### SPECIFICATIONS: WS-41003 Gill Multi-Plate Radiation Shield Sensor Types:

Accommodates temperature and humidity sensors up to 26 mm diameter.

#### **Construction:**

UV stabilised white thermoplastic plates Aluminium mounting bracket - white Stainless steel U-bolt clamp

#### **Radiation Error:**

at 1080W/m<sup>2</sup> intensity - dependant on wind speed 0.4 ℃ RMS at 3m/s 0.7 ℃ RMS at 2m/s 1.5 ℃ RMS at 1m/s

#### Model WS-41342 Platinum Temperature Probe

Sensor Type: Pt1000 ( $1000\Omega$  RTD) Accuracy:  $\pm 0.3^{\circ}$ C at 0°C Available Options with power requirements: 4 wire RTD 4-20mA (12-30VDC, 20mA) 0-1VDC (8-24VDC, 5mA)

## Model WS-41382 Relative Humidity/Temperature Probe

Sensor Type: Temperature

Humidity:

Accuracy: Temperature: Humidity:

0.3℃ at 0℃ 3% from 10% - 90% R.H. 4% from 0% - 10% & 90% - 100% R.H.

1000Ω Platinum RTD (Pt1000)

**Capacitive Polymer** 

Available Options with power requirements:4-20mA(12-20VDC, 40mA)0-1VDC(8-24 VDC, 9mA)

WS41003-1.0-0

ACN: 001 589 439

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