

*Naturally Ventilated
Requires No Power*



Model 41002
Gill Multi-Plate Radiation Shield

The Gill Multi-Plate Radiation Shield protects temperature and relative humidity sensors from error-producing solar radiation and precipitation. Compact size and light weight make this shield useful for many applications.

The multiple discs have a unique profile that blocks direct and reflected solar radiation, yet permits easy passage of air. The disc material is specially formulated for high reflectivity; low thermal conductivity, and maximum weather resistance. The rugged U-bolt mounting clamp attaches easily to any vertical pipe up to 2" diameter.

The Model 41002 employs a universal adapter to securely hold sensors up to 12.5 mm diameter. The Model 41002P uses a special mounting adapter that can be custom sized to fit any sensor from 12.5 mm to 26 mm; specify the diameter when ordering.

The Temperature Probe is a 1000 Ω Platinum RTD encased in a stainless steel protective sheath. The sensing element is securely mounted in a convenient junction box that fits YOUNG radiation shields. For special applications, the temperature probe is available with various output options. The 4-20 mA current output is useful in high noise, industrial settings or for long cable lengths. The 0-1 VDC option provides a calibrated voltage output signal. Low power circuitry makes it ideal for field studies and remote data-logging applications.

The Relative Humidity/Temperature Probe combines a high accuracy humidity sensor and a 1000 Ω Platinum RTD. Available with 0-1 VDC or 4-20 mA outputs, sensors are mounted in a common junction box.



Ordering Information

MODEL

GILL MULTI-PLATE RADIATION SHIELD	41002
<i>Includes universal adapter for sensors to 12.5 mm diameter.</i>	
GILL MULTI-PLATE RADIATION SHIELD	41002P
<i>With custom sensor adapter. Specify diameter from 12.5 mm to 26 mm.</i>	
TEMPERATURE PROBE- RTD OUTPUT	41342
4-20 mA OUTPUT*	41342L *
0-1 VDC OUTPUT*	41342V*
RELATIVE HUMIDITY/TEMPERATURE PROBE:	
4-20 mA OUTPUT*	41372L *
0-1 VDC OUTPUT*	41372V*
ACCESSORY JUNCTION BOX <i>Specify sensor diameter (6 mm max.)</i>	41390

Specifications

Sensor Types:

Accommodates temperature and humidity sensors up to 26 mm (1 in) diameter

Radiation Error:

@ 1080 W/m² intensity- Dependent on wind speed
0.4° C (0.7°F) RMS @ 3 m/s (6.7 mph)
0.7° C (1.3°F) RMS @ 2 m/s (4.5 mph)
1.5° C (2.7°F) RMS @ 1 m/s (2.2 mph)

Construction:

UV stabilized white thermoplastic plates
Aluminum mounting bracket, white
Stainless steel U-bolt clamp

Dimensions:

12 cm (4.7 in) diameter x 27 cm (10.6 in) high
Mounting fits vertical pipe 25-50 mm (1-2 in) diameter

Weight:

Net weight- 0.7 kg (1.5 lb)
Shipping weight- 1.4 kg (3 lb)

MODEL 41342 Platinum Temp. Probe

Sensor Type:

1000 Ω Platinum RTD

Accuracy:

±0.3° C at 0° C(standard)
±0.1° C at 0° C(optional)

Available Outputs: (Power Requirement)

4 wire RTD	41342
4-20 mA (12-30 VDC, 20 mA)	41342L
0-1 VDC (8-24 VDC, 5 mA)	41342V

MODEL 41372 Rel. Humidity/Temp. Probe

Sensor Type:

Temperature:1000 Ω Platinum RTD
Humidity:Capacitive Polymer

Accuracy:

Temperature: $\pm 0.3^{\circ}\text{C}$ at 0°C (standard)
 $\pm 0.1^{\circ}\text{C}$ at 0°C (optional)
 Humidity: 3% from 10 to 90% RH
 4% from 0-10, 90-100%

Available Outputs: (Power Requirement)

4-20 mA (12-30 VDC, 40 mA)	41372L
0-1 VDC (8-24 VDC, 9 mA)	41372V

***SPECIFY TEMPERATURE SCALING:**

-50 to +50° CADD SUFFIX C
-50 to +150° F.....ADD SUFFIX F



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