

380-280 Solar Radiation Shield

The **380-280 Solar Radiation Shield** is a low cost solution for protecting temperature and relative humidity probes. The four molded plastic plates provide maximum airflow around the probe while at the same time minimizing direct exposure of the probe tip to sunlight. The shield also protects from rain and snow.

- Models to fit various sensors
 - 380-280
 0 to 10 mm (0 to 3/8")
 - o **380-280-HMP60** 0
 - 0 to 13 mm (0 to 1/2")
 - Bushings removed 0 to 19 mm (0 to 3/4")
- Extension shroud (380-280 only) shields sensors that are up to 8" long (200 mm)
- Powder coated aluminum bracket mounts to 1 ½" mast (38 mm)
- Wall mount option

INSTALLATION

Model 380-280 with Shroud

Note: The 380-280 is fitted with two universal bushings that help center and hold the sensor in place. The bushings are suitable for use with smooth probes, such as temperature sensors. If the probe is not smooth (such as humidity sensors which have a filter element at the tip) the probe may be damaged when pulled out for inspection. The bushings may be removed if needed.

1) Determine whether the shroud, which is a short pipe section, will be needed for the temperature sensor that is to be installed. Insert the tip of the sensor into the opening in the bottom of the radiation shield, until the tip of the sensor is within one inch (25 mm) of the upper cap. Now observe whether the body of the sensor that is protruding below the sunshield will be exposed to direct sunlight. If the probe is well shaded then the shroud is not needed. Otherwise, remove the probe and install the shroud by twisting while pressing it into the receiver on the bottom of the sunshield. The tube can be glued in place, if desired, using PVC cement.



380-280 Sunshield with shroud

- 2) Insert the probe until the tip is within an inch (25 mm) of the upper cap.
- 3) Route the cable through the cable clamp that is on the underside of the bracket. This will provide strain relief for the cable and ensure the sensor will not fall out.

Model 380-280-HMP60

Note: The 380-280-HMP60 is fitted with two rubber grommets that cushion and hold the sensor in place. The internal diameter is particularly suited for the 225-HMP60 sensor. The 225-HMP60 can be easily inserted and removed for inspection. Shroud not included.

- 1) Insert the probe until the tip is within an inch (25 mm) of the upper cap.
- 2) Route the cable through the cable clamp that is on the underside of the bracket. This will provide strain relief for the cable and ensure the sensor will not fall out.

For Pipe Mounting

- 1) Remove the U-bolt from the mounting bracket.
- 2) Secure the radiation shield to a 1 ½" mast (38 mm).

For Surface Mounting

- 1) Remove the U-bolt from the bracket.
- 2) Mark the outer two holes of the mounting bracket on the surface.
- 3) Drill the two holes marked in the previous step into the surface.
- 4) Attach the radiation shield with appropriate fasteners (not included).

380-280 Solar Radiation Shield with Bracket

Capacity	1 probe (temperature, humidity or combined temp/RH) Accommodates sensors up to 0.75" (19 mm) diameter
Radiation error	2°F @ WS > 3 mph (1°C @ WS > 4.8 kph)
Material	UV stabilized ABS plates, PVC top cap
	Aluminum mounting bracket, white
	Stainless steel U-bolt clamp
Mounting	Vertical pipe mount: 1.25" (32 mm) o.d. with U-bolt
	Surface mount: Remove U-bolt. Mounting screws not included.
Size	4" Dia x 10" H (102 x 254 mm) mounting arm 6" L (152 mm)
Weight / Shipping	1 lb (0.15kg) / 2 lbs (0.91 kg)

ORDERING INFORMATION

380-280
380-280-HMP60

Solar Radiation Shield (with shroud) Solar Radiation Shield (without shroud)

NovaLynx Corporation

PO Box 240 Grass Valley CA 95945 Phone (530) 823-7185

