

## 255-100 Analog Output Evaporation Gauge

The **255-100 Analog Output Evaporation Gauge** is designed to accurately measure water level in an evaporation pan. As water evaporates from the pan or precipitation fills the pan, a float mechanism turns a precision potentiometer which can be monitored by a data logger to record the change.

The range of the potentiometer is zero to 1000 ohms. The potentiometer requires a regulated excitation voltage, typically 5 Vdc. The output signal is wired to produce a decreasing voltage as the water level decreases. The effective range is 0 to 9.444 inches (0-239.9 mm) of water.

## **Features**

- Sturdy aluminum construction
- Triangular base with leveling screws
- Easy access to the float/chain assembly
- Precision potentiometer for accurate measurement
- ½" coupler for connection to the evaporation pan.



| Potentiometer Specification               |   |
|---|---|
| Accuracy                                  | 0.25%   |
| Linearity                                 | 0.25%   |
| Rotation                                  | 360° continuous                                 |
| Electrical angle                          | 340°±1°   |
| Resistance                                | 1,000 ohms ± 10%                                |
| Potentiometer operating temperature range | -40° to +140° F (-40° to +60°C) See note below. |
| Mechanical range                          | 0 to 10 inches (0-254 mm)                       |
| Electrical range                          | 0 to 9.444 inches (0-239.9 mm)                  |
| General                                   |   |
| Water inlet port                          | 1/2" NPT female coupler                         |
| Cable                                     | 50' (15 m) 24 AWG, 3 conductor, shielded        |
| Body dimensions                           | 8" Dia x 27.5" Tall (20 cm Dia x 70 cm Tall)    |
| Base dimension                            | 16" (41 cm) Triangle, with leveling bolts       |
| Weight                                    | 7.5 lbs (3.4 kg)                                |
| Shipping Weight                           | 15 lbs (6.8 kg)                                 |

## **Ordering Information**

| 255-100       | Analog Output Evaporation Gauge, 50' cable                                   |
|---------------|--|
| 255-704-B     | Evaporation Logger   |
| 255-100C-4    | Signal Conditioning PCB, 4-20mA Output                                       |
| 255-100C-4N   | Signal Conditioning PCB, 4-20mA Output, NEMA enclosure                       |
| 255-200       | Class A Evaporation Pan  |
| 255-100P/F    | Stainless Steel Connecting Pipe and Fittings for attaching gauge to pan, 60" |
| 255-100 P/F-S | Stainless Steel Connecting Pipe and Fittings for attaching gauge to pan. 6"  |

**Note:** All water must be removed from the evaporation gauge in freezing weather to prevent damage caused by expanding ice.