



Overview

The 255-100, manufactured by Novalynx, determines evaporation rate by measuring the changing water level in your evaporation pan. The evaporation gauge produces a resistance output that Campbell Scientific data loggers can Reliable in Harsh Environments

monitor. The 255-200 or another standard National Weather Service Class A evaporation pan must be purchased separately.

Benefits and Features

- Compatible with most Campbell Scientific data loggers
- > Low-power device for reading the water level of an evaporation pan such as the 255-200

Technical Description

The 255-100 consists of a float, pulley, and counterweight attached to a precision 1000-ohm potentiometer mounted through a gear assembly in a weatherproof housing. It has a triangular base plate equipped with three leveling screws and a bubble level. The potentiometer produces a resistance output proportional to the position of the float, which can be monitored on site using a data logger or monitored remotely by telemetry equipment. The 255-100 can be placed directly in the pan, or connected to the pan using the 255-100P/F stainless-steel pipe and fittings. Instead of using the 255-100P/F, a 1/2-in. polybraid (fiber reinforced) flexible tubing, nylon fittings (1/2-in. NPT x Hose Bar), and small stainless-steel hose clamps can be used; this equipment is available from a local hardware store.

Specifications

| Water Input Port | 1/2-in. NPT coupling, female |
|------------------------|------------------------------|
| Counter Weight | 114 g (4 oz) stainless steel |
| Total Resolution | 0.76 mm (0.03 in.) |
| Potentiometer Accuracy | 0.25% |
| Rotation | 360° continuous |

| Electrical Angle | 340°, ±1° (20° gap) |
|--------------------------------|---|
| Resistance | 1,000 ohm, ±10% |
| Operating Temperature Range | -40° to +60°C Evaporation is normally not measured at temperatures below freezing. |

| Linearity | 0.25% |
|-------------------|-----------------------------------|
| Mechanical Range | 0 to 254 mm (0 to 10 in.) |
| Electrical Range | 0 to 240 mm (0 to 9.44 in.) |
| Float | 10.2 cm (4 in.) diameter, plastic |
| Cable Description | 3-conductor, 24 AWG, shielded |
| Cable Length | 15 m (50 ft) |

| Diameter | 203 mm (8 in.) |
|-----------------|---|
| Height | 700 mm (27.5 in.) |
| Base Dimensions | 40.6 cm (16 in.) triangle with leveling screws |
| Weight | 3.4 kg (7.5 lb) |
| Shipping Weight | 6.8 kg (15 lb) |

For comprehensive details, visit: www.campbellsci.eu/novalynx255-100

