CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

255-100

Analog Output Evaporation Gauge



Reliable in Harsh Environments

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 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

Detailed 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.com/novalynx255-100

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