

Designed For Reliability...

TBH-LP
RAINGAUGE HEATER KIT

METEOROLOGY

General Description

The HyQuest Solutions Tipping Bucket Heater has been designed for use with the HyQuest Solutions Tipping Bucket Raingauges. The device is a thermostatically controlled heating element, that raises the temperature of the interior of the raingauge and catch to avoid the freezing of the gauge in cold climates with subsequent loss of precipitation records. When the ambient temperature drops below a preset value (+ 4°C), the snow sensor in the funnel is activated. The heating elements remains "OFF" until snow is detected in the catch area (funnel). The heating elements are turned on and off to keep the funnel temperature at the preset Setpoint temperature. (+ 10°C) This will continue for a minimum preset time (18 mins) after there is no snow remaining in the catch. The heater will then be switched off and the unit will return to the "WAIT" mode until triggered by another snow event. The system will be de-activated when temperature drops below (-20 °C) or above (+5 °C) nominal.

Features

- Power Requirement AC/DC.
- Low Power Consumption
 - Only Operating When Snow Is Detected.

- Fully Automated Operation.
- Thermostatically Controlled Heating Element
- SDI-12 Interface

Specifications

- Ambient temperature range -40°C to +70°C (-40°F to +158°F)
- Snow sensor and heater operating parameters between -20°C to +5°C (-4°F to 41°F)
- Average power generated 35 watts (150 watts during initial minute warm up)
- Voltage requirements
 - Main Power:* 10VDC to 30VDC or 12VAC to 28VAC
 - SDI-12 Power:* 9.6VDC to 16VDC (SDI-12 standard)
- SDI-12 Interface: optically isolated ,1200 baud, 7 bits, even parity.
- Power generated and current requirements:
 - 12 VDC
 - 45 watts average (70 watts when heater is on)
 - 3.7 amps average (approx 65% duty cycle) (5.8 amps when the heater is on)



Model TB3 Rain Gauge with Heater Kit
Model TBH-LP Installed



N.B. Specifications are subject to change at any time without notice.



Contact Us

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