Fisher Porter Precipitation Gauge Upgrade Kit

Overview

The National Weather Service's network of 2,200 rain gauges records precipitation accumulation at 15 min. intervals on a punched paper tape. Sutron designed and manufactured an NWS rebuild kit to convert existing gauges into digital measuring instruments

The new kit can be installed in the field using simple tools in under 1 hour. It includes a data recorder to automatically measure & record precipitation at user-set intervals. A display provides easy viewing of the data & setup. A 2-point calibration routine is built-in for simple field calibration of the gauge using the standard NWS 15" calibration weights.

Data can be retrieved via the SD card slot, RS232, or SDI-12. The system easily interfaces to GOES Satellite Transmitters and wireless modems for integration into an automatic data collection system. The recorder also is wired to measure temperature (sensor not provided). Additional measurements can be added at the factory.

Features

- Designed for F&P Models 35-1558 & 35-1559
- Converts Gauges to Digital Recorders
- Built-In Display for Simple Setup, Calibration, & Maintenance
- SD Card Interface for Easy Download of Data
- RS232/SDI-12 Interfaces for Telemetry When Needed
- Built-in display for viewing data, setup and maintenance
- Precision load cell measurement with high accuracy
- >300,000 readings stored in flash memory
- Foolproof two-point calibration method compatible with 15" cal weights
- RS232, SDI-12 interfaces for connection to telemetry systems

ORDERING

NWS-0001-1	Fischer Porter Precipitation Gauge Upgrade Kit Consists of Load Cell/Mount, Precip Recorder/Bracket, Battery, Solar Panel/Bracket.

SPECIFICATIONS
Subject to change without notice.

Operating Temperature	-40 to +60°C
Power	8-16 VDC Operating Voltage <1ma @12 VDC quiescent <20ma @12 VDC active
Battery	12VDC Gell Cell, 7amp-hr @20°C
Solar Panel	2 Watts
Range	20" Precipitation
Resolution	user settable up to 0.001"
Accuracy	<0.01 " @20°C <0.05" -40C to +60°C
Clock	+/- 2 minutes a month (0 to +50°C)
Keypad/Display	2x20 Display, 6 button keypad, 2 status LED
Password	Optional Password for Setup
User Settings	Station Name, Date/Time, Measurement Interval, Averaging Time, Sensor ID
Log Capacity	>300,000 Readings, Flash Memory
Log Contents	Precip, Temperature, Battery Voltage, User & System Events
Log Access	SD Card, RS232
Log Format	CSV File when Downloaded
RS 232	DB9 with +5V on Pin 9 w/Capacity of 71mA User Set Baud from 300 to 115200 Baud Full Flow Control
SDI-12	V1.3 Compliant
Air Temperature Sensor	Factory Configured for Customer-Supplied Vishay 1M2002 Thermistor for Temperature
Add'l Sensors	Consult Factory