Model 3002 Data Sheet

Rainlogger

Model 3002

The Rainlogger is a data logger designed to count the tips of a standard tipping-bucket rain gauge with a reed switch output. Compact and waterproof, this durable field unit offers long-term reliability with a battery that lasts up to 10 years.

The rainfall level per user-defined sampling period, and a fiveminute maximum rainfall are logged in non-volatile memory, which holds up to 40,000 sets of readings. Linear sampling can be set from 5 minutes to 99 hours.

Detailed Data

Levelogger customers can add rainfall data to their water level monitoring networks using the same intuitive Levelogger Software. The Rainlogger provides easy incorporation of precipitation data into existing Levelogger data. Rainfall data can allow correlation between precipitation events and recorded changes in groundwater or surface water levels.

The Rainlogger is compatible with all Solinst Levelogger communication and deployment accessories. Logged data can be downloaded direct to a PC or to a hand-held Leveloader Gold. This versatile logger has the ability to integrate into a Solinst Telemetry System and has the option to communicate using SDI-12 protocol. (See Model 9100 and 3001 Data Sheets.)

| Technical Specifications | |
|--------------------------|--|
| Battery Life | 10 years (logging 2 parameters/10 minutes) |
| Clock Accuracy | +/- 1 minute/year |
| Operating Temperature | -20°C to 80°C |
| Maximum # Readings | 40,000 sets of readings |
| Memory | Non-volatile EEPROM, FRAM back-up |
| Communication | Optical infra-red to RS232 or USB |
| Sampling Mode | Linear |
| Sampling Rate | 5 minutes to 99 hours |
| Size | 7/8" x 7" (22 mm x 175 mm) |
| Weight | 4.8 oz (135 grams) |
| Wetted Materials | 316L Stainless Steel, Delrin [®] , Viton [®] |



Advantages

- Add rainfall data to your Levelogger network
- Compatible with Solinst Telemetry Systems
- Memory up to 40,000 time stamped readings
- 10 year battery
- Waterproof, low maintenance design
- Designed to be used with most tipping buckets

Operation

The Rainlogger is simply programmed with the user-friendly Levelogger Software. An Optical Reader connects the Rainlogger to a laptop or desktop PC and the Levelogger Software automatically detects the attached Rainlogger. The Rainlogger is also able to communicate with a Leveloader Gold.

The Rainlogger is easily deployed in the field, using a 3-pin connector cable attached to the rain gauge.

Data downloading can be 'All Data', 'Append Data', 'Partial Data', or 'Data Dump' at any time. Data can be displayed in graph or table format and exported to other programs. The Rainlogger has self-test capability, a reliable EEPROM memory and FRAM back-up memory and the ability to upgrade firmware.

Applications

- Measuring local precipitation
- Determining peak rainfall events
- Stormwater management
- Remote monitoring of watersheds
- Ideal for correlating precipitation events to:
 - Groundwater and surface water data
 - Watershed and drainage basin studies
 - Agricultural and forestry studies

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