Rainlogger 5
Model 3002

The Rainlogger 5 is an inexpensive datalogger designed to record the tips of a standard tipping-bucket rain gauge. This compact and durable field unit offers long-term reliability and convenience with a battery that lasts up to 10 years, and ESD (electrostatic discharge) protection with an ABS housing.

The event time stamp and total rainfall per time period is logged in non-volatile memory, which holds up to 100,000 readings. Sampling is event based, as the Rainlogger 5 records and saves each tip of the tipping-bucket as it happens.

Detailed Data

Levelogger customers can add rainfall data to their water level monitoring networks using the intuitive Levelogger Software. The Rainlogger 5 provides easy incorporation of precipitation data into existing Levelogger data. Rainfall data can allow correlation between precipitation events and changes in groundwater or surface water levels.

The Rainlogger 5 is compatible with all Solinst Levelogger 5 communication and deployment accessories. Logged data can be downloaded direct to a PC, your smart device using the Solinst Levelogger App, or to a DataGrabber 5 data transfer device. This versatile logger has the ability to integrate into a Solinst Telemetry System and has the option to communicate using SDI-12 protocol.

Advantages

• Single-eye optical for fast, reliable communication
• ABS housing provides excellent ESD protection
• Memory for up to 100,000 time stamped readings
• Low maintenance with 10 year battery
• Designed to be used with most tipping-buckets
• Compatible with Solinst Telemetry Systems

Operation

The Rainlogger 5 is simply programmed with the user-friendly Levelogger Software. A Field Reader 5 or Desktop Reader 5 connects the Rainlogger 5 to a laptop or desktop PC and the Levelogger Software automatically detects the attached Rainlogger.

The Rainlogger 5 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’, or ‘Data Dump’ at any time. Data can be displayed in graph or table format and exported to other programs. The Rainlogger 5 has self-test capability, reliable 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

Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Battery Life</td>
<td>10 years (logging 2 parameters/10 mins.)</td>
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<tr>
<td>Clock Accuracy</td>
<td>+/- 1 minute/year</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 80°C</td>
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<tr>
<td>Maximum # Readings</td>
<td>100,000 readings</td>
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<tr>
<td>Communication</td>
<td>Optical high-speed: 57,600 bps with USB</td>
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<tr>
<td>Sampling Mode</td>
<td>Event Based, Real Time View</td>
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<tr>
<td>Sampling Rate</td>
<td>Variable – records each tip</td>
</tr>
<tr>
<td>Size</td>
<td>22 mm x 160 mm (7/8”x 6.3”)</td>
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<tr>
<td>Weight</td>
<td>44 grams (1.6 oz)</td>
</tr>
<tr>
<td>Wetted Materials</td>
<td>ABS, Delrin®, Viton®</td>
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<tr>
<td>Rain Gauge Requirement</td>
<td>Standard tipping-bucket with normally-open or closed style reed switch output</td>
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LeveLogger 5 App Interface

A smart alternative for programming, data collection, viewing and sharing, is the Levelogger 5 App Interface that uses Bluetooth® wireless technology to connect all Solinst dataloggers to your smart device using the Solinst Levelogger App (see Model 3001 Solinst Levelogger 5 App Interface data sheets).

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