The RT-VLOG is a robust, cost effective, compact and user-friendly datalogger for all pluck-type vibrating wire sensors on the market.

**Description**

The new RT-VLOG is a robust, compact and cost-effective Vibrating Wire (VW) datalogger designed to monitor all pluck-type vibrating wire sensors on the market.

Available in 4 or 8 channel configurations, the RT-VLOG is ideal for use in small and medium size projects, and especially for multi-level piezometers, load cells and multipoint extensometers.

Its non-volatile memory can store over 63,648 records. Each record includes the VW reading and temperature reading with time and date. When the memory is full, recording either stops or overwrites the oldest record.

Data can easily be retrieved in Hz and Engineering Units on your laptop via USB cable. The logger manager software saves all the reading in a text file (CSV), easily imported into your spreadsheet software.

A 900MHz Hermes Radio mounted onto the circuit assembly is also available on the RT-VLOG 4/8-R900 versions.

An optional RS-232 serial connection is available for IP modems, WiFi serial servers, etc.

The RT-VLOG is housed in an IP 68 enclosure fitted with cable glands for signal cable. Plugs are provided for unused cable glands.

One lithium D-Cell battery provides power for 9 years for the 4 Channel Datalogger and over 6 years for the 8 channel RT-VLOG in a moderate temperature, assuming readings taken every hour. The extra capacity battery option (for 3 additional lithium batteries) will extend the battery life in extreme cold weather.

**Key Features**

- Cost effective
- Robust & compact
- Easy set-up, no programming required
- 63,500 records in non-volatile memory
- Fast data retrieval (USB cable)
- 900MHz Radio or RS-232 communication options
- Lithium D-Cell, Long battery life
- IP 68 rated enclosure

**Applications**

- Piezometers
- Crackmeters
- Extensometers
- Strain Gauges
- Total Pressure Cells
- Temperature Sensors

www.smartec.ch
### Specifications

<table>
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<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Memory</td>
<td>63,500 records in non volatile memory, including VW reading, temperature reading with time and date</td>
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<tr>
<td>Data retrieval</td>
<td>USB cable or optional serial connection</td>
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<tr>
<td>Logger Settings</td>
<td>Date, time, communication and memory mode (Stop or continuous by overwriting the earliest writing)</td>
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<tr>
<td>Logger Schedule</td>
<td>Logger start time for synchronization, reading interval (max: 1 year, min. 4 ch: 20 sec., 8 ch: 30 sec.)</td>
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<tr>
<td>Sensor Setting</td>
<td>Sensor ID, serial number, calibration factor and sweep range for each sensor Choice of thermistor or RTD for temperature sensors</td>
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<tr>
<td>Status Indicator</td>
<td>3 LED to inform user of current state</td>
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<tr>
<td>Resolution</td>
<td>0.001% for vibrating wire sensors</td>
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<tr>
<td></td>
<td>0.1°C for temperature sensors</td>
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<tr>
<td>Accuracy</td>
<td>± 0.002% (reading + 0.04 Hz) for vibrating wire sensors</td>
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<tr>
<td></td>
<td>± 0.5°C for temperature sensors</td>
</tr>
<tr>
<td>VW Measurement Range</td>
<td>450 to 6000 Hz</td>
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<tr>
<td>Temperature measurement range</td>
<td>-20 to 120°C (Thermistor or RTD)</td>
</tr>
<tr>
<td>Temperature operating range</td>
<td>-40 to 85°C</td>
</tr>
<tr>
<td>Battery</td>
<td>Lithium D-Cell* (Default 1, Extra Capacity Option for 3 additional batteries) Recommended: Xeno Energy # XL-205F or Tadiran # TL-5930 (TL-5930/S)</td>
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<tr>
<td>Battery life (typical)</td>
<td>9 years for the 4 channel logger in moderate temperature, assuming readings at every hour 6 years for the 8 channel logger in moderate temperature, assuming readings at every hour</td>
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<tr>
<td>Weatherproofing</td>
<td>IP 68 enclosure &amp; cable glands for signal cable. Plug are provided for unused cable glands</td>
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<tr>
<td>Dimensions</td>
<td>22.8 x 19.8 x 9.7 cm (9.0 x 7.8 x 3.83 in.)</td>
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<tr>
<td>Weight</td>
<td>4 ch: 0.92 Kg, 8 ch: 1.24 Kg</td>
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</table>

### Ordering information

- RT-VLOG 4 4 Channel datalogger
- RT-VLOG 8 8 Channel datalogger
- RT-VLOG 4 RH900 4 Ch + Hermes Radio (902-928 MHz)
- RT-VLOG 8 RH900 8 Ch + Hermes Radio (902-928 MHz)
- RT-VLOG 4 RS232 4 Ch with serial connection
- RT-VLOG 8 RS232 8 Ch with serial connection
- RT-VLOG 4 RS232-S 4 Ch Sensemetrics ready
- RT-VLOG 8 RS232-S 8 Ch Sensemetrics ready
- Pipe mount kit 1"
- Pipe mount kit 1.25"
- Pipe mount kit 1.5"
- Pole mount kit 6-12"
- Wall mount kit

### Optional accessories

- Lithium D-Cell battery*
- 4 Channel extra capacity battery options
- 8 Channel extra capacity battery options
- RS-232 serial connection
- Pipe mount kit 1"
- Pipe mount kit 1.25"
- Pipe mount kit 1.5"
- Pole mount kit 6-12"
- Wall mount kit

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*Lithium D-Cell Batteries will only be shipped by ground transportation. Xeno Energy or Tadiran lithium D-Cell batteries can easily be sourced locally for international customers. Lithium batteries are now considered as hazardous goods for air shipment.*