The waterproof SL wireless module offers a variety of configurations to read and transmit data from any electrical and/or vibrating wire sensors.

**Description**

The SL Series is a robust interface module designed to read data from installed sensors (electrical and/or vibrating wire) in a borehole. The module can be configured to meet your exact project specifications.

The PVC housing has been tested under water at pressures up to 3 bars. Its waterproof design is ideal for applications where extensometers, piezometers or in-place inclinometer sensors need to be read at a location completely flush with the surface. The battery pack is installed in an isolated housing at the bottom to allow easy access for battery replacement.

The SL module can also be used as a standalone logger. Typical application would be the installation of a datalogger in a manhole located on a roadway or runway. The in-road antenna would transmit the data to a base station located in a safe indoor or outdoor environment. The proposed antenna is waterproof, robust and resistant to many chemical products like oil or gasoline.

**Key Features**

- Different configurations available
- Compatible with different types of sensors
- Waterproof (3 bars)
- Logging or radio transmission options

**Applications**

- Data acquisition of civil engineering sensors in special locations and conditions.
- Read extensometers, piezometers or in-place inclinometer sensors in harsh environments.
- Read sensors in a manhole located in on roadway or runway with a surface-mount in-road antenna.

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Specifications

Physical / Environmental

- **Dimensions:** 171 x 381 mm
- **Water resistance:** 300 kPa (IP68)
- **Battery life:** 1 year with one reading and one transmission per day
- **Temperature range:** -25 to +50°C (-55 to +80°C optional)

Analog reading

- **Accuracy:** +/- 0.12% of F.S.
- **Resolution:** 0.03% of F.S.

Vibrating wire

- **Accuracy:** +/- 0.013% of F.S
- **Resolution:** 0.001 Hz RMS

Radio module (RL or RX model)

- **Frequency:** 910 to 918 MHz
- **Baud rates:** from 1200 to 38.4 kbps

Model Number

<table>
<thead>
<tr>
<th>Module</th>
<th>Sensor type</th>
<th>Interface type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL</td>
<td>6VW : 6 vibrating wires with temp</td>
<td>RL : Radio transmitter with logging capacity</td>
</tr>
<tr>
<td></td>
<td>2VW : 2 vibrating wires with temp</td>
<td>RX : Radio transmitter without logging capacity</td>
</tr>
<tr>
<td></td>
<td>IPI : IPI chain</td>
<td>SL : Serial connection with logging capacity</td>
</tr>
<tr>
<td></td>
<td>2AN : 2 analog sensors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6AN : 6 analog sensors</td>
<td></td>
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</table>

Standard Model

<table>
<thead>
<tr>
<th>Model*</th>
<th>Sensors</th>
<th>Radio</th>
<th>Logging capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL-6VW-RL</td>
<td>6 vibrating wires</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>SL-6VW-RX</td>
<td>6 vibrating wires</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>SL-2VW-RL</td>
<td>2 vibrating wires</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>SL-2VW-RX</td>
<td>2 vibrating wires</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>SL-IPI-RL</td>
<td>In-Place Inclinometer</td>
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<td>Yes</td>
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<tr>
<td>SL-2PM-RL</td>
<td>2 analog sensors</td>
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<td>Yes</td>
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<tr>
<td>SI-2VW-SL</td>
<td>2 vibrating wires</td>
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<td>Yes</td>
</tr>
</tbody>
</table>

* Other configurations also available

Ordering Information

Please specify:
- Model number

Optional Accessories

- Connecting cable for piezometers
- Connecting cable for extensometers
- Connectors for In-Place Inclinometer
- Extra battery pack
- 3dB In-Road Antenna