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.
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>
</tr>
</tbody>
</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>
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<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