The wireless LoadSense receiver is used in conjunction with the LoadSense wireless Load Sensor. It provides the user with an easy way to receive and output data from the Load Sensor. Enclosed in a hardwearing aluminium box the receiver is suitable to be installed into environments where it may be subjected to harsh conditions.

The receiver is easy to install as it only requires DC power to be supplied to the unit. An SMA connector allows the use of an external antenna.

The receiver outputs a string of data from the Load Sensor which includes: Serial number, full scale, Load, Temperature, RSSI and battery voltage. The data is constantly outputted from the receiver straight from “power on” as long as the Load Sensor is in range. The output can be provided as either RS232, RS422, USB or Analog. This provides the functionality of being able to send the data over a longer distance if the receiver was to be in a remote location. The interface is suitable for applications where no user interaction is needed and data is fed into a data logger or remote display.

Software
LoadView is an easy to use advanced load monitoring software, available to assist data recording and instrumentation.

Features: 3 types of display. Text files compatible with Matlab and Excel. Real time chart plotting.

LabVIEW Vis are available for users to design their own process control applications.

DLLs are also available for users to write their own custom software.

Benefits
- Small Footprint (133mm x 67mm x 43.5mm)
- Receives data up to a distance of 100m
- Receives data at 10 times a second
- Analog or digital data outputs
- Minimal startup time
- Very simple installation
- Operates on 2.4GHz licence free band

Technology
The LoadSense Load Transducer works in the worldwide harmonized band of 2.4 GHz so does not require a licence to operate and uses advanced technologies to enable data to be sent and received error free, these include, forward error correcting and data whitening.

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WLS-RI Wireless Load Sensor Receiver Interface - Data Specification

### Technical Details

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud rate</td>
<td></td>
</tr>
<tr>
<td><strong>RS232</strong></td>
<td>9600</td>
</tr>
<tr>
<td><strong>RS422</strong></td>
<td>9600</td>
</tr>
<tr>
<td><strong>Analog Out</strong></td>
<td>0-2V Output</td>
</tr>
<tr>
<td><strong>RFI / EMC</strong></td>
<td>-89 dBm</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>SMA</td>
</tr>
<tr>
<td><strong>Power Input</strong></td>
<td></td>
</tr>
<tr>
<td><strong>11-28 VDC INPUT</strong></td>
<td>60mA</td>
</tr>
<tr>
<td><strong>Socket Type</strong></td>
<td>Binder 680 3 POL</td>
</tr>
<tr>
<td><strong>Environmental Protection</strong></td>
<td>IP54</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>332 Gramms</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>Aluminum</td>
</tr>
<tr>
<td><strong>Operating Temp Range</strong></td>
<td>-20ºC to + 55ºC</td>
</tr>
<tr>
<td><strong>Storage Temp Range</strong></td>
<td>-40ºC to + 85ºC</td>
</tr>
<tr>
<td><strong>RF</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Frequency Range</strong></td>
<td>2425 - 2430 MHz 20 Channels 250kHz steps</td>
</tr>
</tbody>
</table>

### Mechanical Data

- **Connector:** D9P
- **Pin 1:** nc, RXD, TXD, nc, GND, nc, nc, nc, nc
- **Pin 2:** TX- , TX+, RX-, RX+, GND, nc, nc, nc, nc
- **Pin 3:** OUT, GND, nc, nc, nc, nc, nc, nc, nc
- **RS232:** VBUS, D-, D+, GND, nc, nc, nc, nc, nc
- **RS422:** VBUS, D-, D+, GND, nc, nc, nc, nc, nc
- **USB B:** VBUS, D-, D+, GND, nc, nc, nc, nc, nc

### Analog Output
- 0-2V, capable of driving analog meter

Sensor Technology Ltd reserves the right to change specification and dimensions without notice.