

WLS-RI Wireless Load Sensor Receiver Interface

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.



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.

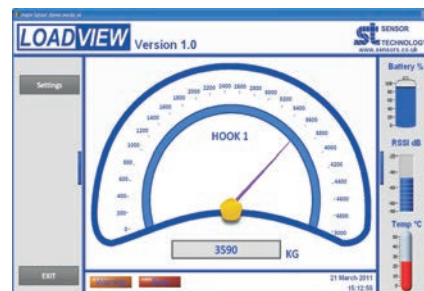
Software

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.

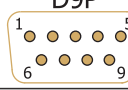


DLLs are also available for users to write their own custom software.



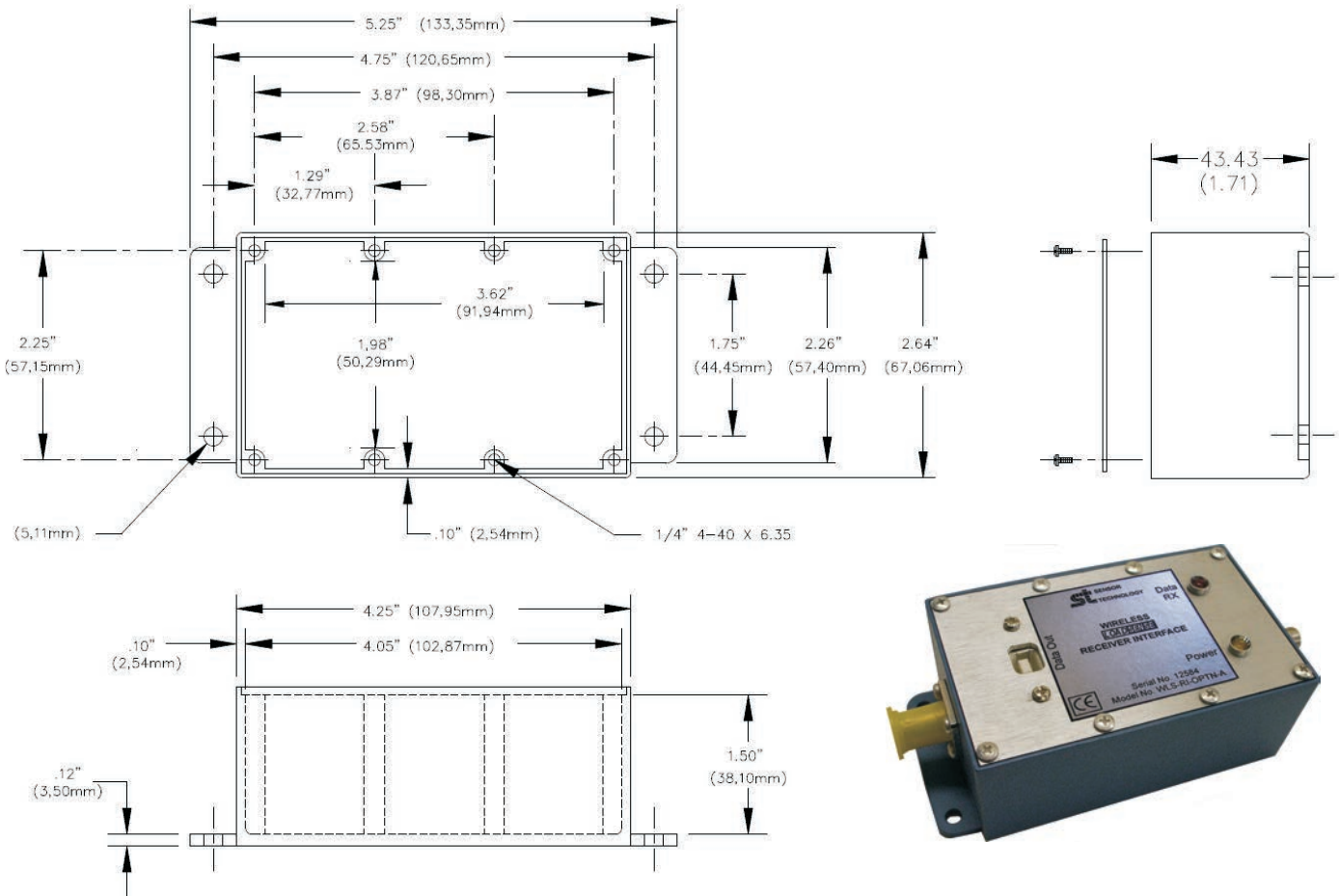
Benefits

- 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

WLS-RI Wireless Load Sensor Receiver Interface - Data Specification

Parameter		Value									Connector D9P 
	Baud rate	Pin 1	2	3	4	5	6	7	8	9	
RS232	9600	nc	RXD	TXD	nc	GND	nc	nc	nc	nc	
RS422	9600	TX-	TX+	RX+	RX-	GND	nc	nc	nc	nc	
Analog Out	0-2V Output	OUT	GND	nc	nc	nc	nc	nc	nc	nc	
USB B		VBUS	D-	D+	GND	nc	nc	nc	nc	nc	
RF											
Receiver Sensitivity					-89 dBm						
Frequency Range					2425 - 2430 MHz 20 Channels 250kHz steps						
Connector					SMA						
Power Input											
	Current	1			2		3			Connector	
11-28 VDC INPUT	60mA	INPUT			GND		SHIELD				
Socket Type		Binder 680 3 POL									
Technical Details											
Environmental Protection					IP54						
Weight					332 Grams						
Materials					Aluminum						
Operating Temp Range					-20°C to + 55°C						
Storage Temp Range					-40°C to + 85°C						
RFI / EMC					To EN301-489 1						
Analog Output					0-2V, capable of driving analog meter						

Mechanical Data



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