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.

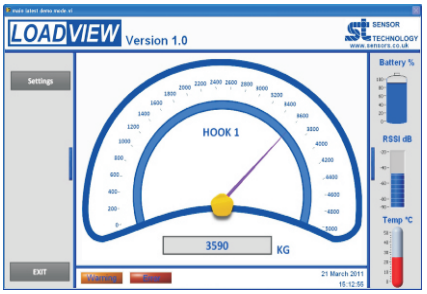
Software

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.

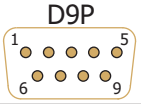
DLLs are also available for users to write their own custom software.



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

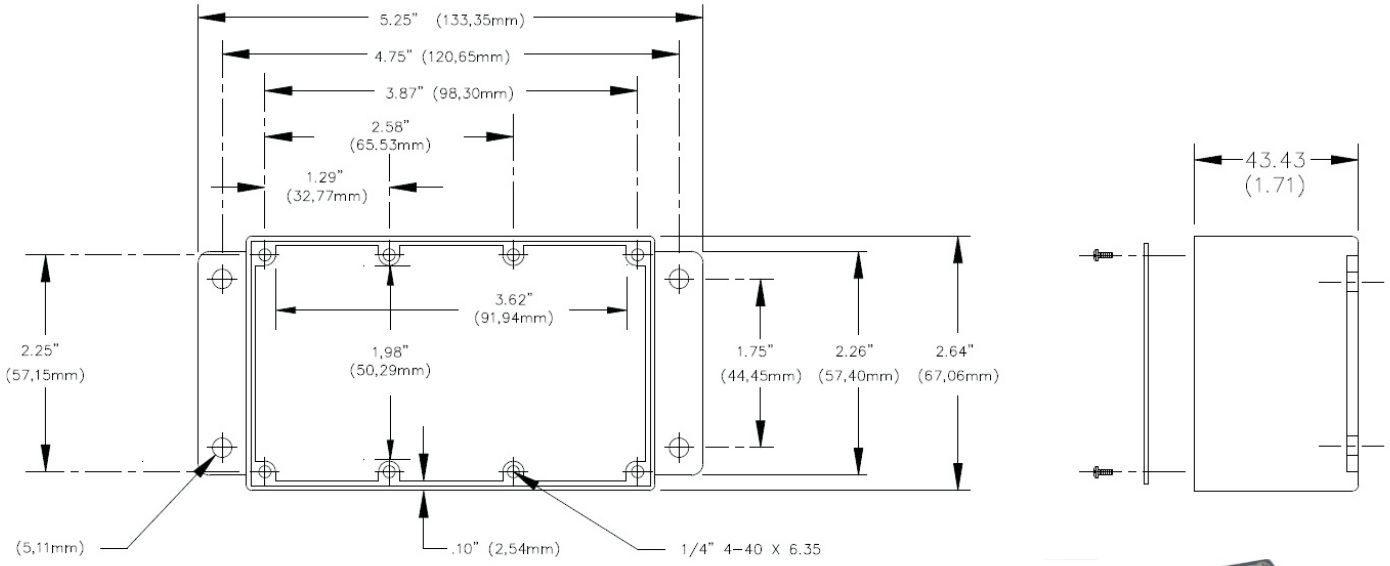
Parameter	Value										
	Baud rate	Pin 1	2	3	4	5	6	7	8	9	Connector D9P
RS232	9600	nc	RXD	TXD	nc	GND	nc	nc	nc	nc	
RS422	9600	TX-	TX+	RX+	RX-	GND	nc	nc	nc	nc	
Analog Out	0-2V Output	OUT	GND	nc	nc	nc	nc	nc	nc	nc	
USB B		VBUS	D-	D+	GND	nc	nc	nc	nc	nc	

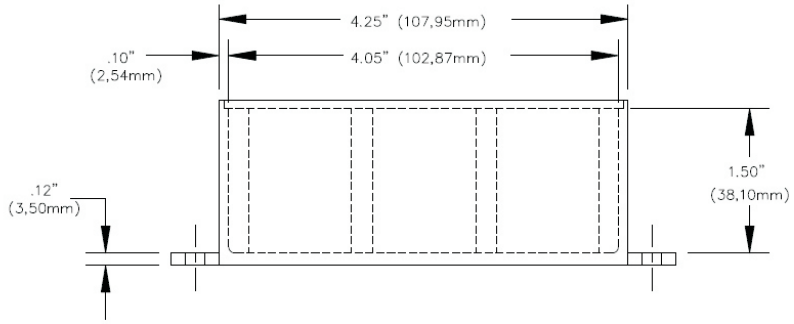
RF	
Receiver Sensitivity	-89 dBm
Frequency Range	2425 - 2430 MHz 20 Channels 250kHz steps
Connector	SMA

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 Gramms
Materials	Aluminum
Operating Temp Range	-20ºC to + 55ºC
Storage Temp Range	-40ºC to + 85ºC
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.