

WiSense Wireless Load Cell Interface Module WSNWLC2X-10



Specifications

Component	Specs	Dimensions	Connectors	Add-on Specs
WSN1120L	<ul style="list-style-type: none"> ➤ Low-power Sub-Ghz wireless mesh node. ➤ Includes CC1120 high performance sub-ghz radio (from TI) & MSP430G2955 microcontroller (from TI). ➤ Radio board has a U.FL antenna connector. ➤ Radio board has PCB antenna ➤ Node is programmed to operate in the 865-867 MHz license free band in India 	<ul style="list-style-type: none"> ➤ 42mm x 42mm x 10mm ➤ 4 mounting holes 	<ul style="list-style-type: none"> ➤ 3-pin UART connector (TX, RX and Gnd) ➤ Two 2x7 connectors exposing pins of MSP430G2955 ➤ 4-pin TI programming/debugging connector 	<ul style="list-style-type: none"> ➤ The module comes with a U.FL to bulkhead SMA cable assembly. This allows the node encasement in a weather-proof box with antenna outside ➤ Default antenna (external half wave dipole omnidirectional) ➤ Other antenna options possible on request

<p>WSLCI2553</p>	<ul style="list-style-type: none"> ➤ Load cell signal conditioning board. ➤ Has AD7797 analog front-end & an MSP430G2553 16-bit microcontroller from TI ➤ On board CMOS to RS-232 converter (MAX3221) ➤ LDO for converting input voltage (micro USB or power jack) to 3.3 V. ➤ PCB: 1.6 mm FR-4, ENIG high quality finish 	<ul style="list-style-type: none"> ➤ 42mm x 42mm with 4 mounting holes in the 4 corners 	<ul style="list-style-type: none"> ➤ 4-pin screw terminal to interface to 4 wire load cells ➤ Serial interface for sending load cell measurements off the board (UART over CMOS) ➤ Serial interface for sending load cell measurements off the board (UART over RS-232) 	<ul style="list-style-type: none"> ➤ Power supply: <ul style="list-style-type: none"> ○ Micro USB type B receptacle ○ Power Jack (Up to 16 Volts). A separate LDO on the board steps down high input voltage to 5 Volts ○ Two pin terminal for battery(3.0V to 3.6V only)
Component	Specs	Dimensions	Connectors	Add-on Specs
<p>WSLIC100 (Optional)</p>	<ul style="list-style-type: none"> ➤ Power supply board ➤ Onboards STNS01 lithium-ion charger IC facilitating auto switchover when external supply is down. STNS01 charges Li-Ion battery & provides 3.1 V supply for running other components when external power supply is available.. ➤ Includes a thermistor (Murata - NXFT15XH103) used to monitor the temperature of Li-Ion battery 	<ul style="list-style-type: none"> ➤ 42mm x 42mm x 10mm ➤ 4 mounting holes 	<ul style="list-style-type: none"> ➤ Two pin terminal for Li-Ion battery (nominal voltage 3.7 V). ➤ 2-pin screw terminal for attaching 2 wire thermistor (NXFT15XH103) ➤ Pin for reporting Li-Ion battery voltage to off-board microcontroller ➤ Micro USB type B receptacle ➤ Power Jack 	<ul style="list-style-type: none"> ➤ Power supply: <ul style="list-style-type: none"> ○ Micro USB type B receptacle (supplies 5 volts to the STNS01) ○ Power Jack (Up to 16 Volts). A separate LDO on the board steps down high input voltage to 5 Volts ➤ Power output: <ul style="list-style-type: none"> ○ 3.1 V / 100 mA generated by an LDO internal to the STNS01

Side View

Top View
(showing the Lithium-Ion charger board)

