

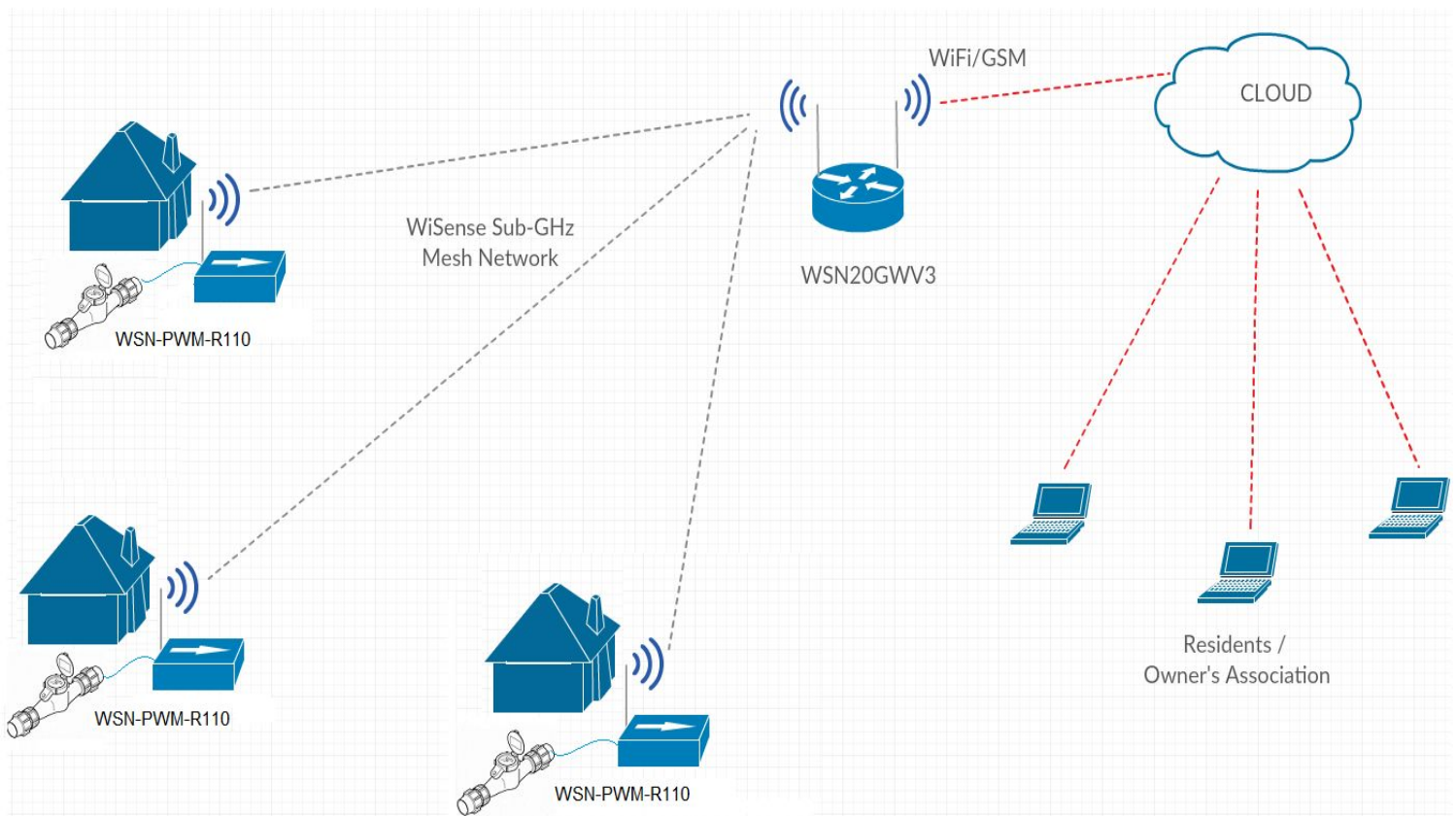
## WiSense Wireless Water Metering Module WSN-PWM-R110



### **Water Meter With Pulse Output**

Model: WPM-103

15mm, Multi Jet Water Meter (up to 50° C) Inferential type, magnetically coupled, having dry dial and hermetically sealed totaliser. Maximum pressure is 16 bar. Max reading is 99999.9999 m<sup>3</sup>.



## SYSTEM ARCHITECTURE

## Specifications

Component	Specs	Dimensions	Add-on Specs
<p><b>WSN1120L</b></p>	<ul style="list-style-type: none"> <li>➤ Low-power Sub-Ghz WiSense wireless mesh node.</li> <li>➤ Includes CC1120 high performance sub-ghz radio &amp; MSP430G2955 microcontroller.</li> <li>➤ Radio board has a PCB antenna as well as a U.FL connector.</li> <li>➤ Node is programmed to operate in the 865-867 MHz license free band in India.</li> <li>➤ Raw data rate is 10kbps. Default transmit power is +13 dBm. Both parameters can be changed.</li> </ul>	<ul style="list-style-type: none"> <li>➤ 42mm x 42mm x 10mm</li> <li>➤ 4 mounting holes</li> </ul>	<ul style="list-style-type: none"> <li>➤ U.FL to bulkhead SMA cable assembly supports external antenna (node and associated electronics inside a weatherproof enclosure with just the antenna and meter interface cable outside).</li> <li>➤ Default antenna (external half wave dipole omni-directional) Other antenna options possible on request</li> <li>➤ Support for full mesh or star only network configurations.</li> </ul>

	<p><b>Note:</b> WSN1120L node counts pulses generated by the attached flow sensor. The pulse count is stored in on-board non-volatile memory. WSN1120L can be configured to send the pulse count periodically (interval &gt;= 1 sec) to external entities via network coordinator/gateway. This interval can be changed any time.</p>		
<b>WSNFSIB10</b>	<ul style="list-style-type: none"> <li>➤ water flow sensor interface PCB</li> <li>➤ 2-wire interface to water flow meter</li> <li>➤ 3 wire interface for water flow meter</li> </ul>	<ul style="list-style-type: none"> <li>➤ 42mm x 42mm with</li> <li>➤ 4 mounting holes</li> </ul>	Supports both 2 wire and 3 wire pulse output meters.-
<b>Component</b>	<b>Specs</b>	<b>Dimensions</b>	<b>Add-on Specs</b>
<b>WSLIC100</b> (Optional)	<ul style="list-style-type: none"> <li>➤ Power supply board</li> <li>➤ Onboard lithium-ion charger IC facilitating auto switchover when external supply is down. Includes a thermistor (NXFT15XH103) which is used to monitor the temperature of Li-Ion battery</li> </ul>	<ul style="list-style-type: none"> <li>➤ 42mm x 42mm x 10mm</li> <li>➤ 4 mounting holes</li> </ul>	<ul style="list-style-type: none"> <li>➤ Power input options:                             <ul style="list-style-type: none"> <li>● Micro USB type B receptacle (supplies 5 volts to the STNS01)</li> <li>● Power Jack (Up to 16 Volts). A separate LDO on the board steps down high input voltage to 5 Volts.</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>➤ Power output: 3.1 V/100 mA</li> <li>➤ Comes with modular AC-DC converter             <ul style="list-style-type: none"> <li>● 85 VAC - 305 VAC,</li> <li>● 3 Watts</li> <li>● 5V, 600mA</li> </ul> </li> </ul>
<p><b>Note:</b>The node can run on battery alone (AA, AAA or Li-Ion) or on Li-Ion battery with battery backup. This depends on the frequency at which the node is configured to send water consumption data. If the frequency is low (say once a day or less) the node can run on battery alone. Otherwise it should be powered by the WSLIC100 power supply unit.</p>			