

# GPS Node Adaptor



## Features

- Design for connecting to electric meter or IPC through RS-485 interface (RS-232 option)
- Support internal mounting in e-meter without housing
- Enclosure design for sliding rail mounting in electric
- Long range over 15 kilometers radius
- High sensitivity down to -148 dBm
- Optional support a wide frequency range from 470MHz to 928MHz \*see specification below for more details
- Optional sensors: GPS, 3 axis accelerometer, temperature and air pressure sensors

This Internet of Things (IoT) GPS Node Adaptor is specifically designed to work with electric meters and IPC for wide area smart grid applications. It communicates with the LoRa Gateway using the LoRaWAN protocol standard for long range wide area deployments. Typical deployment is using star network configuration similar to mobile network base station. Because of its long range and many device capabilities, it is a much more cost effective way for service providers to deploy this for sensor networks than to deploy a GPRS network for sensor network applications. Typical wireless sensor network has difficulty to achieve better than 95% coverage because of wireless blind spots near the edge of the coverage. This product with the associated AP/Gateway can be configured to solve this issue. It's a cost effective way to provide full redundancy coverage for the entire service area.

## Specification

Model Name	WSMS-116
Frequency Band	EU 862~870 MHz / US 902~928 MHz / India 865~867 MHz / AS 923 MHz / CN 470~510 MHz
Number of Channels	Configurable up to 16 channels / Nodes will select available channel to send data
WAN Protocol	LoRaWAN
Modulation	Based on LoRaWAN
RF Transceiver	SX1276
Transmit RF Power	19 dBm
Receive Sensitivity	Down to -140 dBm
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-20°C ~ 70°C
Power Supply	5V via USB charger
Battery	Rechargeable Li-on battery
Antenna Type	One (1) SMA connector for LoRa transimmission
Interfaces	1 Micro-USB connector for charging, 4 LED indicators, Optional 1 RS-485
Dimensions	L:80 x W:73 x H:20 mm
Weight	123 g
Security	AES 128

# GPS Node Adaptor



## SKU Detail

SKU	Country	Channels	Frequency Band (MHz)
WSMS-116_BLKD	USA	16	US915 (902~928)
WSMS-116_EU	Europe	8	EU868 (862~870)

\* Samples are also available for India 865~867 MHz.

