Indoor Femto Gateway

Features

- Compliance to LoRaWAN 1.0.2
- Up to 8 concurrent channels for LoRa transmission
- Built-in 2.4G 802.11b/g/n Wireless LAN
- Patented repeater mode for last mile coverage
- Option support wide frequency range from 470MHz to 928MHz
- Various internet connections: Ethernet, Wireless bridge, 3G/4G dongle (via USB port)
- Active scan for channel availability with RSSI levels
- Web UI for LoRa and network configuration
- Cloud service for gateway health monitor
- Support Listen Before Talk for downlink
- Ideal for indoor positioning
- Support OTA and USB upgrade

Gemtek has been instrumental in the development of LPWAN system solutions, and is an early provider of LoRaWAN protocol-based, end-to-end LPWAN solutions. The LoRaWAN technology is designed to connect low-cost, battery-operated sensors over long distances in harsh environments that were previously too challenging or cost-prohibitive to connect. Because of its long range, high penetration and high sensitivity capabilities, it is a much more cost effective way for service providers to deploy LoRaWAN network for sensor applications in vertical market domain.

This Femto Gateway is specifically designed for wide area IoT applications. Applications include, but not limited to home security, automatic meter reading, monitoring fault indicators, monitoring street lights, etc. This gateway is Femto type and very suitable for small business or private area use case like parking space, exhibition center or campus etc. It is also suitable for providing coverage for indoor blind spots.

Specification

Model Name	WLRGFM-100
Frequency Band	EU 862~870 MHz / US 902~928 MHz / India 865~867 MHz / AS 923 MHz / CN 470~510 MHz
Number of Channels	Up to 8 concurrent channels
Wireless LAN	802.11 b/g/n 2.4G
WAN Protocol	LoRaWAN
Modulation	Based on LoRaWAN
RF Transceiver	SX1301 with SX1257 or SX1255 for CN-470 SKU
Transmit RF Power	0.5W (up to 27 dBm)
Receive Sensitivity	Down to -142 dBm
Operating Temperature	-10ºC ~ 55ºC
Storage Temperature	-10ºC ~ 60ºC
Power Voltage	5VDC/2A via mini-USB port

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Antenna Type	Built-in Wi-Fi antenna and one (1) external SMA LoRa antenna
Interfaces	1 LAN 10/100Mbps, 1 USB 2.0 for upgrade and 3/4G dongle, 4 LED indicators
Dimensions	L:116 x W:91 x H:27 mm
Weight	160 g
Security	AES 128

SKU Detail			
SKU	Country	Channels	Frequency Band (MHz)
US	USA	8	US915 (902~928)
CN-920	China	8	920~925
CN-470M	China	8	CN470 (470~510)
JP-920M	Japan	8	920~928
EU-800M	Europe	8	EU868 (862~870)

* Sample available for India 865~867 MHz

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