

Low-Power Long Range LoRa™ Technology Gateway for IoT applications

Description

Stratagem's Wavehub gateway provides an easy to use LoRa™ access point. Devices requiring a low-power solution for long range wireless data transmission can connect to a Wavehub gateway using LoRaWan™ class A or class C protocols.

Wavebricks distributed infrastructure allows Wavehub owners to share radio coverage expanding radio capability beyond classical gateway range.

Applications

- Automated Sensor Reading
- Home and Building Automation
- Wireless Alarm and Security Systems
- Asset tracking
- Agricultural monitoring
- Smart Cities
- Industrial Monitoring and Control
- Machine to Machine
- Internet of Things (IoT)

General Features

- LoRa™ to Internet gateway
- Multiple network topology:
 - Star: LoRaWan™ compatible server
 - Mesh: optimal routing server
- Long radio coverage (>15 km coverage in suburban and >5 km coverage in urban areas)
- High robustness against interferences
- Bidirectional communications
- Access point to worldwide Wavebricks gateways network
- Local data storage
- Over-The-Air firmware updates



Operational

- Ethernet/Wifi connection
- 100V/220V power supply
- Device registration:
 - Local: unlimited
 - Wavebricks network: 50 devices
- HTTP REST API for automatic administration and network operations
- Embedded web interface for data management
- Cloud data storage and data server services available (options)
- Aluminum frame, 160 mm x 111 mm

RF/Analog Features

- 868Mhz frequency band
- TX Power: up to 20dBm
- RX Sensitivity: -142.5 dBm, can operate with negative SNR, CCR up to 9 dB
- Emulates 49x LORA demodulators and 1x (G)FSK demodulator, support of multiple channels and spreading factors in parallel