**DESCRIPTION**

- Low cost PicoGateway for Private LoRa Network targeting Smart Building, Smart Farming, Smart Asset …)
- Based on powerful open Linux ARM Cortex A8 architecture
- Embedded LoRa MAC Server
- Customizable with several options (GPS/ WiFi /2G/3G …)
- Complete end to end LoRa infrastructure solution coupled with éolane LoRa Reference Design for sensors/actuators

**MAIN FEATURES**

- **Dimensions:** 100 * 80 mm (excluding cable)
- **PHY:** LoRa or FSK 868 MHz / 433 or 169 MHz
- **RF interfaces:** 2* SMA connector – bi-band
- **Protocol:** LoRaWAN1.0
- **Network capacity:** up to 200 nodes (10min period)
- **1000 nodes (every day)**
- **Low power:** less than 5W
- **Encryption:** AES 128

**APPLICATIONS**

- M2M / Command & control
- Asset geotracking
- Smart Factory / Traceability
- Lone worker protection systems
- Smart Building / Smart Farming
- Unattended ground sensors
- Monitoring of dangerous matters
- Preventive maintenance
- Tracking
**Technical Specification**

**Interface**
- LoRa RF interface 1: SMA female 50 ohm
- 169/433 RF interface 2: SMA female 50 ohm
- Power: DC jack
- Configuration: USB or Ethernet
- LAN output 1: RJ45 / 10-100 Mbps / HTTP
- LAN output 2: SUBD9 / RS485/232/Modbus
- Optional 1: GPS (embedded)
- Optional 2: GSM / GPRS (external)
- Optional 3: WIFI (dongle USB)

**RF interface 1**
- Frequency band: 863 – 870 MHz band
- RF nominal power: up to +19 dBm
- RF high power option: up to +25 dBm

**RF interface 2 (169 Mhz)**
- Frequency band: 169 MHz ISM band
- RF nominal power: up to +17 dBm
- RF high power option: up to +25 dBm

**RF interface 2 (433 Mhz)**
- Frequency band: 433 MHz ISM band
- RF nominal power: +10 dBm up to 17 dBm

**Modulation**
- LoRa: SF6 to SF12
- FSK:
- LORA channel BW (KHz): 12.5; 25; 62.5; 125; 250; 500
- LoRa sensitivity: -139 dBm (125KHz, SF12)

**Linux Board**
- Processor: 1GHz – Cortex A8
- RAM: 512 Mo
- eMMC: 4Go

**Mechanicals**
- Casing dimensions: 100mm * 80mm
- Casing: Plastic
- Casing IP: Indoor use
- DC input: DC Jack
- Consumption: < 5W
- AC input: with external AC-USB adapter
- Temperature: 0°C to +50°C

**Protocol - Network**
- LoRaWAN End node: compatible (default SF12)
- Network capacity: up to 200 nodes (10min period) / 1000 nodes (every day)

**Ordering Code**
ePGW-868-A-Band2-B-Option123

- A L : +19 dBm / H: +25 dBm
- Band 2: 169 MHz ISM / 433 MHz ISM
- B L : +17 dBm / H: +25 dBm
- Option 1: GPS, 2: GSM, 3: WIFI (b/g)

**Accessories Codes**
- 001 External AC-Jack adapter
- 002-i 868 MHz indoor antenna
- 002-o 868 MHz outdoor antenna
- 003 433 MHz antenna
- 004 169 MHz antenna
- 005 RF cable 5m

**Additional Services**
- Full custom design from specification to product
- Additional custom or standard wireless protocol
- In-house manufacturing
- Installation and after-sales services

**Ordering Information**

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