

EMB-GW1301-O

LoRaWAN®

Gateway solution



The LoRaWAN® **EMB-GW1301-O** gateway is a multi service upgradable platform designed to meet IoT and M2M scenarios. It enables LoRaWAN® connectivity to the cloud, providing a cost-effective solution for IoT wireless infrastructure.

The **EMB-GW1301-O** is based on the Semtech SX1301 chipset, allowing to operate on 8 simultaneous channels. Thanks to the SX1301 performance and the efficient Embit RF design, the device is able to reach up to 15 km in rural areas and up to 3 km in urban areas. Network connectivity is provided by the Ethernet interface. optional radio communication interfaces can be included. It is connected to the most well-known LoRaWAN® Network Server.

Every Embit standard module can be integrated into the gateway, exploiting the range of the Embit's OEM modules portfolio and allowing the collection of data or the control of end-devices with different wireless protocols.

The **EMB-GW1301-O** is based on Linux. Complete root access is provided allowing full customization of the software.

Main features

- Full compliance with LoRaWAN® network protocol on 868MHz band
- Rapid deployment with existing LoRaWAN® compliant Network Server or your LoRaWAN® Network Server.
- Supports LoRaWAN® version 1.0.2 and proprietary LoRa®.
- Powerful Semtech SX130x Multi SF channels handles thousands of end-devices.
- Optional wireless interfaces compliant to IEE 802.15.4, ZigBee®, Wireless M-Bus, WiFi IEEE 802.11 b/g/n, LoRaWAN® or proprietary protocols.
- Easy, proactive monitoring for process.

Technical Specifications

| | |
|------------------------------|--|
| Processor | Quad-Core ARM Cortex™ - A7(1.2GHz) |
| RAM Memory | 1GB, DDR3 |
| Flash Memory | 4 GB, EMMC |
| LAN Connection | Ethernet RJ 45 10/100/1000 Base-T |
| LoRaWAN® Connectivity | Semtech SX1301 +20/ +27 dBm @868 MHz |
| Connectivity | GPS 3G/LTE |
| Optional Connectivity | IEEE 802.15.4™/ZigBee® Wireless M-Bus |
| Ports | Ethernet RJ 45 10/100/1000 N-Type Antenna Connector |
| Temperature Range | -40 °C +85 °C |
| Rx Sensitivity | up to -138 dBm |
| OS | Embedded Linux |
| Power Consumption | <20W |
| Power Source | POE IEEE 802.3af |
| Dimensions | L:276mm W:276mm H:96mm |
| Weight | 1.9 kg |
| Chassis Type | IP 67 rated |
| Certifications | CE According to RED |

 **SEMTECH**

 **LoRa®**

 **embit**
EMBEDDED & WIRELESS
SOLUTIONS
www.embit.eu