# Indoor LoRaWAN Gateway

## Description

The Gateway receives data from the sensors wirelessly and provides local LoRaWAN connectivity at specific locations. The system operates on an open radio frequency and uses low transmission power, so there is no interference with Wi-Fi or other equipment already installed.

## Operation

The gateway is designed to capture data from the *Smart Box & GeoPortal* sensors using the LoRaWAN protocol. The gateway transmits the data to our server where the information is processed for the visualization of the parameters. The backhaul from the gateway to our server is provided by either ethernet or the cellular network using M2M data connection.

All sensor data is safely stored for historical analysis in our server eliminating human error in its collection and optimizing resources.

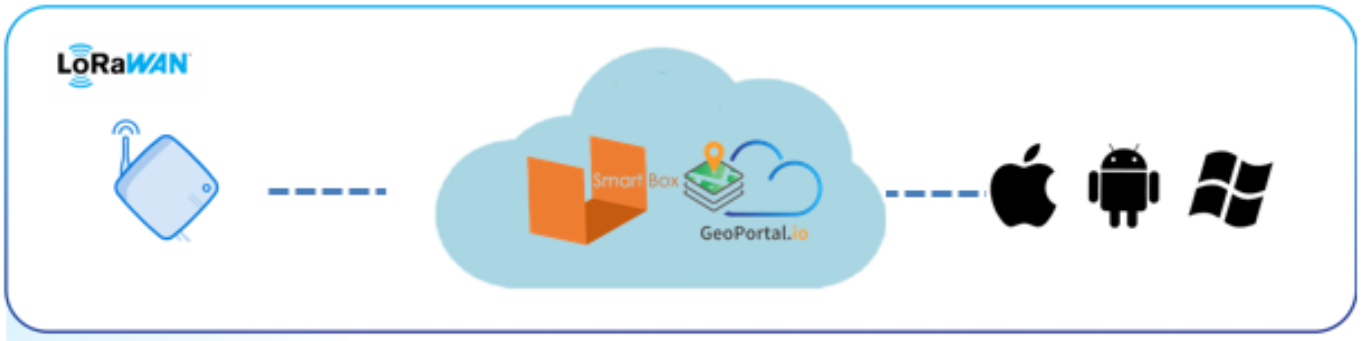
## Main Features

- Uses the LoRaWAN technology
- Range of the wireless network: 1 km
- RF Communication: 915 MHz
- Without electromagnetic interference
- Low power
- Easy to install and low maintenance

# Specifications

| Physical configuration | |
|---|---|
| Size | 160 x 90 x 35 mm |
| Weight | 163 g |
| Mounting | Wall or table |
| **Power management** | |
| Power supply | 110 VAC / 12 VDC |
| Nominal voltage | 12 VDC |
| Average consumption | 8 W |
| **LoRaWAN conectivity** | |
| RF communication | 915 MHz |
| Range | 1 km |
| Sensitivity | -140 dBm (SF12) |
| Maximum EIRP | 27 dBm |
| Transmission power | 20dBm (100 mW) |
| Radiation at a 10 m distance | -25 dBm (3 µW) |
| Ethernet | 10/100 Mbps (RJ45) |
| Cellular | M2M SIM card (included) |
| **Standards and Certifications** | |
| Protection class | IP30 |
| Installation | For indoor use only |
| Humedity range | 5%  to 95% RH |
| Temperature range | -20 °C to 55 °C |






**Integrated solution for remote monitoring**