

# 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

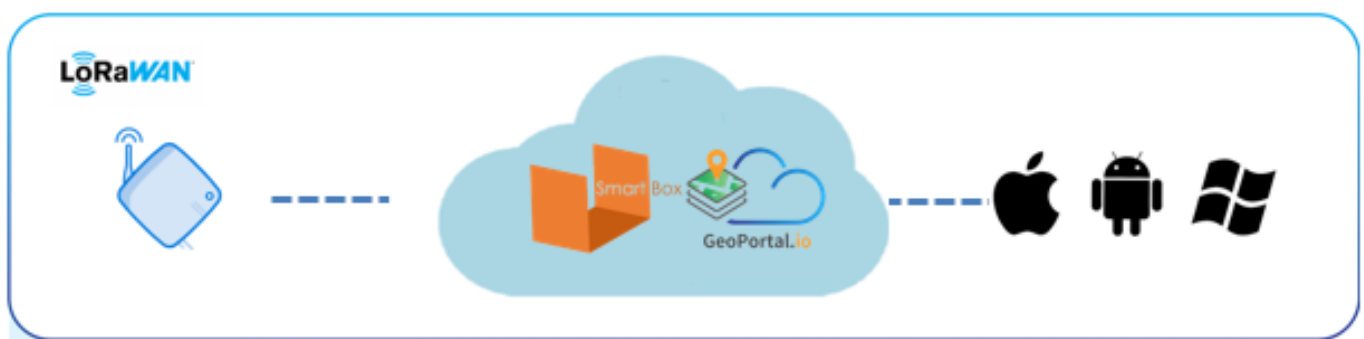
- Uses the LoRaWAN technology
- Range of the wireless network: 1 km
- RF Communication: 915 MHz
- Without electromagnetic interference
- Low power
- Easy to install and low maintenance



© Smart Box & GeoPortal - versión 2.0

# 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 connectivity	
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
Humidity range	5% to 95% RH
Temperature range	-20 °C to 55 °C



**Integrated solution for remote monitoring**