## AirGTW-FWD | LoRa Gateway FWD for LoRaWAN networks





Technical parameters	AirGTW-FWD
Power supply	
Supply voltage:	48 V DC / active PoE
Input:	max. 6 W
Connection	
Connection:	PoE connector with RJ 45 power supply according to
	the 802.11af standard.
Communication	
Protocol:	LoRa
Transmitter frequency	
- UPLINK:	868,1 MHz, 868,3 MHz, 868,5 MHz
- DOWNLINK:	869,525 MHz
Encryption:	AES128
Range in open space:	
	Approx. 10 km
Transmission power (max.):	500 mW / 27 dBm
Hardware	
Baseplate:	Rapsberry Pi 3
Max. connected nodes	thousands
OS:	Linux
LoRa chip:	Semtech SX-1301 s SX-1257
Antenna	
Emission:	omnidirectional VGD4
Material:	high quality fiberglass
Gain:	8 dBi
Polarization:	vertical
Other parameters	
Working temperature:	-20 + 60 °C
Relative humidity:	95 %
Montage:	on the boom
	Ø 30-50 mm
Protection degree:	IP56
Overvoltage category:	III.
Pollution degree:	2
Dimension without antenna:	280 x 213 x 90 mm
Weight:	1731 g (without antenna)
Antenna length:	660 mm
Antenna Weight:	1400 g

- LoRa Gateway has the LoRa receiver / transmitter function and the packet forwarder, receives / broadcasts LoRa messages and transmits them to the assigned server.
- LoRa Gateway serves as a transceiver for customers who have their own server solutions.
- The Gateway (or BTS Based Transceiver Station) serves as a tool to create your own LoRa home network for the Internet of Things.
- It collects requests from end devices, and then transfers them to a predetermined Server.
- The antenna provides radiation in all directions.
- The gateway is also designed for outdoor use.
- For proper Gateway functionality, you need a connected Ethernet cable and a permanent 48 V DC / PoE power supply.

## **Device description**

