



Technical parameters		AirGTW-LNS
<b>Power supply</b>		
Supply voltage:	48 V DC / active PoE	
Input:	max. 6 W	
<b>Connection</b>		
Connection:	PoE connector with RJ 45 power supply according to the 802.11af standard	
<b>Communication</b>		
Protocol:	LoRa	
Transmitter frequency	868,1 MHz, 868,3 MHz, 868,5 MHz	
- 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	
<b>Hardware</b>		
Baseplate:	Rapsberry Pi 3	
Max. connected nodes	thousands	
OS:	Linux	
LoRa chip:	Semtech SX-1301 s SX-1257	
<b>Antenna</b>		
Emission:	omnidirectional VGD4	
Material:	high quality fiberglass	
Gain:	8 dBi	
Polarization:	vertical	
<b>Other parameters</b>		
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	

- The LoRa Gateway has the LoRa receiver / transmitter function and the server, receives / transmits messages Lora and processes it on your own server.
- Contains LoRa Network Server (LNS) software for setting and managing end devices.
- By default, the server is open and unsecured - it is designed for further customer integration.
- 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 evaluates them.
- The LoRa Gateway Server can be assigned to thousands of IoT terminal devices communicating on this network.
- Assignment of end devices is done through a web portal, which then records all requirements from individual sensors.
- 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

