## LoRaWAN Modul OEM | Built-in board





Technical parameters	LoRaWAN Modul OEM
Supply voltage:	5 - 24 V DC / 3V3 140 mAh
Supply voltage tolerance:	+10 /-15 %
Setting	
Setting:	With a message from the server
Indication	
Indication:	blau LED
Communication	
Protocol:	LoRa
Transmitter frequency:	868 MHz
Range in open space:	Approx. 10 km*
Transmission power (max.):	25 mW / 14 dBm
Other parameters	
Working temperature:	-15 + 50 °C
Operation position:	any
Mounting:	soldering
Antenna output by	
application:	ULF connector
Dimension:	19.5 x 46.1 x 4 mm**
Weight:	13.6 g
Antenna output AN-I or AN-E:	
	SMA connector***
Dimension:	19.5 x 57 x 7 mm**
Weight:	15 g
Dimension:	19.5 x 46.1 x 21 mm**
Weight:	13.5 g

- $^{st}$  Depending on network coverage
- \*\* Dimension after breaking source parts
- \*\*\* Max Tightening Torque for antenna connector is 0.56 Nm.

- An existing installation (OEM) module
- Is used to communicate existing devices through the LoRa network
- The function of the device is programmed as required
- Power supply: 5-24 V DC, after breaking the 3 V DC / 140 mAh source section (via linear stabilizer)
- Communication:
- SPI 1x
- Analog pins 8x (12-bit)
- USART 1x
- I / O digital pins 29x
- Optional antenna connection:
- SMT Ultra-Miniature Coaxial Connector
- SMA connector
- by soldering (the antenna is part of the device to which the module is connected)
- Dimensions\*\*:
- with ULF connector 19.5 x 46.1 x 4 mm
- with SMA connector 19.5 x 57 x 7 mm
- with internal antenna 19.5 x 46.1 x 21 mm