

1. Product introduction

The LoRaWAN People Counter is a battery powered sensor for counting people crossing a horizontal line. The counter consists of two parts, an infrared (ir) transmitter part and an infrared receiver part, which always work together.

The ir-transmitter creates an intermediate infrared signal in a fixed frequency.

The ir-receiver is the main part and holds the intelligence and communication with the outside world.



1.1 Principle of work

The ir-transmitter device points the ir beam horizontal towards the ir-receiver part at a recommended height. When this beam is interrupted, the algorithm in the ir-receiver part determines if this was a person and determines the direction A or B.

1.2 Communication

The created data is communicated from the internal algorithm microprocessor to the internal gateway microprocessor. The internal gateway processor communicates this information to the internal LoRaWAN (Certified) module* which takes care of the communication with the LoRaWAN network.

Settings for the LoRaWAN interface are done via NFC memory.

* Please refer the [Related information](#) chapter for more details about this module

1.3 Specifications

For main technical specification please refer the [product sheet](#).

Technical specifications	
Single operation voltage	Nominal 3.0V
Power supply	2x AA Batteries
Protection degree	IP20



People Counter LoRaWAN

- Easy installation
- LoRaWAN Communication
- Free from GDPR issues
- Battery powered
- Bi-Directional horizontal counting
- Infrared technology
- Enhanced Noise Immunity

The LoRaWAN People Counter works with horizontal infrared technology. No camera or personal data is used, meaning you will not have issues regarding the European GDPR.

Easy installation for accurate counting without the need for setting up count lines or calibration and so on.. Count values are registered for people entering and leaving. Data is at a configurable interval to the LoRaWAN network. Status information for remote monitoring is available.



Specifications

Power supply	: 2x 1.5V AA Alkaline batteries
IoT Communication	: Class A LoRaWAN
IR Count Line	: 8 meter max.
Battery life	: approximately 1 year
Dimensions	: 116x69x22mm
Color / Material	: white / ABS (black covers optional)
Configuration	: NFC
Data availability	: Requestable data history from sensor : Acknowledge per packet (configurable)
Payload header	: IMBUILDINGS Payload type information : 48 bit deviceID
Sensor payload	: Counter A (0-65535 relative count value) : Counter B (0-65535 relative count value) : Status value (0-255) : Incremental Count (0-65535) : Call Counter (0-255)

