

ACCELEROMETER & GYROSCOPE V3.0 SENSOR

Overview

NETOP Accelerometer&Gyroscope sensor is a long range wireless sensor. It gives acceleration of X, Y, Z axis and angular rate of ΩY , ΩR , ΩP (Yaw, Roll, Pitch) output periodically, every 15 minutes(default). This sensor is compatible with LoRaWAN technology. The standard version of this sensor is powered by one replaceable 3.6 V AA sized battery (included with purchase).

Key Features

- Real plug & play
- Easy to mount & install
- Compatible with LoRaWAN™ specification
- Maintenance free – install & forget
- Secure communication (AES-128)
- Ultra Low Power Consumption
- Certifications: LoRaWAN™, CE
- +10 years of battery life (*30 minutes data transmit period)



Communication Specs

- Compatible with LoRaWAN Specification 1.0.3
- The sensor uses Low Power Wide Area Network-LPWAN technology (LoRa) for connectivity
- Compliant with Low and High Frequencies (AS923, AU915, CN470, CN779, EU433, EU868, IN865, KR920, RU864, US915 MHz ISM bands)
- Supports High power and Low power LoRa RF applications:
 - Up to +22 dBm at US915 and AU915,
 - Up to +14 dBm elsewhere
- Ultra low power consumption. Excellent long-term stability.
- 170 dB maximum link budget
- Radio Performance : High RX sensitivity down to -148 dBm
- Full ADR, OTAA and ABP support
- Long range wireless data transmission

Mechanics

- Enclosure: IP65/IP67
- Dimensions: 65 x 55 x 27 mm (for IP65)
- Operating temperature: -40°C to +85°C

Data Security

- AES-128

Power Supply

- AA Battery 3.6 V Li-SOCl₂-Saft LS 14500

Indicators

- Status LED (on board)

Sensor Specifications

Measurement range	:	±2.0 g
Linear acceleration sensitivity	:	0.061 mg
Angular rate sensitivity	:	8.75 mdps
Data Transmission Period	:	15 minutes(default)

Certifications & Reliability

- CE
- LoRaWAN™ Certified

Applications

- Inclination monitoring
- Collecting sensor data
- Monitoring Pitch & Roll
- Rotational monitoring