

# ACCELEROMETER & GYROSCOPE SENSOR

## Overview

NETOP Accelerometer&Gyroscope sensor is a long range wireless sensor. It gives acceleration of X, Y, Z axis and angular rate of  $\Omega_Y$ ,  $\Omega_R$ ,  $\Omega_P$ (Yaw, Roll, Pitch) output periodically, every 15 minutes(default). This sensor is fully compatible with LPWAN technology by using NB-IoT(Narrowband-IoT). 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
- Maintenance free – install & forget
- Excellent Extended Range in Buildings and Underground
- Easy deployment utilizing cellular system
- Micro SIM(default) or Chip SIM Card(depend on request)
- Ultra Low Power Consumption
- Certifications: CE, RoHS



## Communication Specs

- The sensor uses LPWAN technology; Narrow Band IoT (NB-IoT) for connectivity
- Supported bands including B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B26/ B28
- Internet Protocol Feature: Support IPv4/TCP/UDP
- Full duplex communication
- Extended Coverage: 10-15km with 164 dB maximum coupling loss (MCL)
- Antenna Types: Internal(default) or External(depend on request) Antenna

## Mechanics

- Housing: ABS
- Dimensions: 65 x 55 x 27 mm
- Operating temperature: -40°C to +85°C

## Data Security

- AES-128

## Power Supply

- AA Battery 3.6 V Li-SOCI2-Saft LS 14500 (Standard 1 piece)

## Indicators

- RGB 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
- EN 62479
- EN60950
  
- EN 301 489-1
- EN 301 489-17
- EN 300 328

## Applications

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