

ACCELEROMETER & GYROSCOPE SENSOR – ATRS0040

Overview

ATRS0040 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
- Ultra Low Power Consumption
- Certifications: LoRaWAN™, CE



Communication Specs

- The sensor uses Low Power Wide Area Network-LPWAN technology(LoRa) for connectivity
- Compliant with AS923, AU915, EU868, KR920, IN865 or US915 MHz ISM bands
- Low power consumption
- Long range wireless data transmission(upto 15km)
- Antenna Types: Internal(default) or External(depend on request) Antenna
- Radio Performance : Upto +14 dBm TX power and -137 dBm RX sensitivity

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-SOCl₂-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

- LoRaWAN™ Certified
- 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