

# WISE-2460

## 10KHz@1-axis Smart Vibration Sensor

NEW



### Features

- RS-485 Serial communication through Modbus/RTU protocols
- 10KHz@1-axis frequency detection range
- Velocity RMS, acceleration RMS, acceleration Peak, displacement, several measurement vibration data
- Support max 10 customize detection ranges between 5 ~ 10,000Hz
- ISO 10816 compliant
- Supports wide temperature -20 ~ 105°C
- IP68 enclosure design

### Introduction

WISE-2460 is a robust RS-485 smart vibration sensor integrated with an ARM Cortex-M7 processor, 10KHz@1-axis high detection range accelerometer and temperature sensor. This powerful computing device balances the bandwidth between edge devices and the application service on the user side.

WISE-2460 builds-in several measurements of vibration, such like velocity RMS, acceleration RMS, acceleration Peak, displacement and so on. By using Advantech WISE Studio utility, users can easily config all the setting, like ISO 10816 alarm threshold setting, customize the 10 detection ranges between 5 ~ 10,000Hz and others.

### Common Specification

#### General

- **Power Input** 10 ~ 30V<sub>DC</sub>
- **LED Indicator** Status, TX, RX
- **Configuration Interface** RS-485 (Modbus/RTU)
- **IP Class** IP68
- **Mounting** Stud mount, mounting pad and adhesives
- **Dimension (W x H x D)** 58.4 x 36.7 x 40 mm
- **Certification** CE

#### Environment

- **Operating Temperature** -20°C ~ 105°C
- **Operating Humidity** 10% ~ 95% RH
- **Storage Temperature** -25°C ~ 120°C
- **Storage Humidity** 5% ~ 95% RH

### 1-Axis Accelerometer Sensor

- **Axis** Z
- **Frequency Range** 5~10000Hz
- **Amplitude Range** ±50g
- **Statistical Time-Domain** Velocity RMS
- **Output Data Rate** 32768Hz
- **Accuracy** 5-4000Hz (5%); 4001~10000Hz (35%)
- **Noise** 25 µg/√Hz in ±50 g range
- **Sensitivity Change Due to Temperature** ±5%

### Ordering Information

- **WISE-2460-MA** 10KHz@1-axis Smart Vibration Sensor

#### Accessories

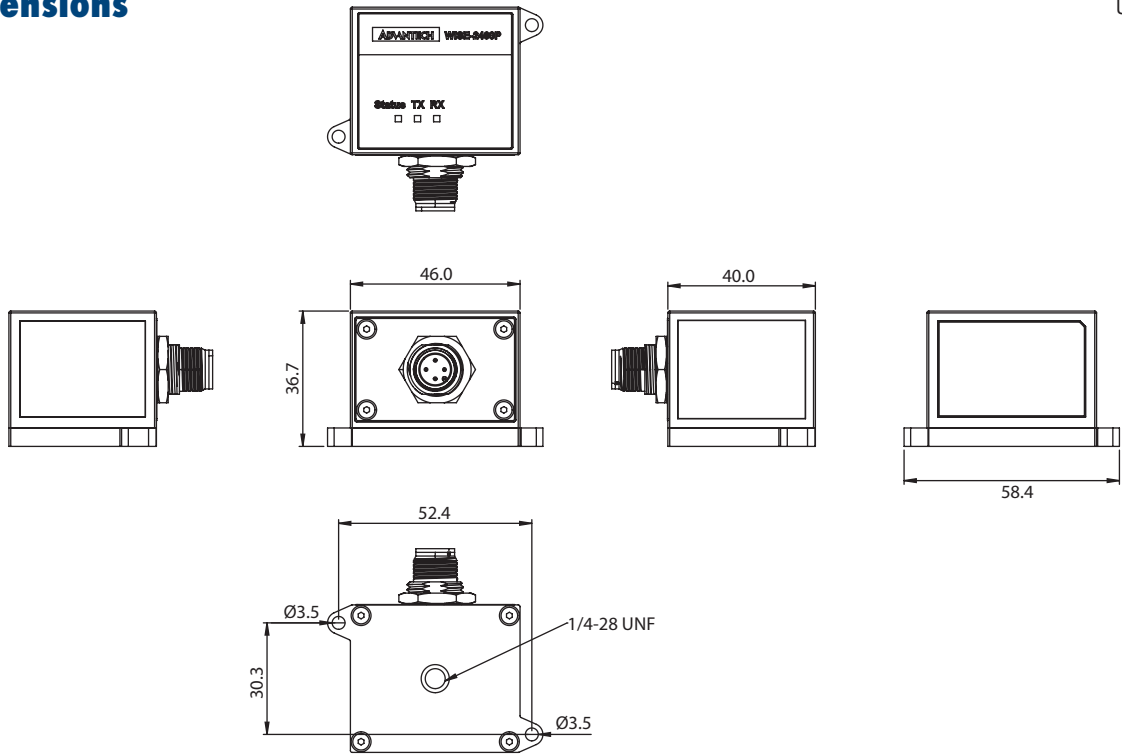
- **25F7000004N000** Magnet base D30XH9mm for WISE-2460 installation
- **WISE-2410-MTB01** Metal base for WISE-2460 installation
- **1700028162-01** M12, A-code, 4 pin, Female with 1M cable
- **BB-RPS-V2-WR2-US** Power Supply, 12V/1A, US plug
- **BB-RPS-V2-WR2-EU** Power Supply, 12V/1A, EU plug

#### Wireless Module

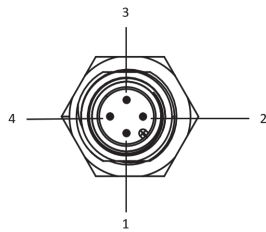
- **WISE-4051-B** 2.4G WiFi IoT Wireless I/O with 8DI/1RS-485

Dimensions

Unit: mm



Pin Define



| WISE-2460 Pin Number | Pin Name | Pin Description |
|----------------------|----------|-----------------|
| 1                    | +VS      | Input power V+  |
| 2                    | Data+    | RS-485 Data+    |
| 3                    | -VS      | Input power V-  |
| 4                    | Data-    | RS-485 Data-    |

| 1700028162-01 Pin Number | Wire Color |
|--------------------------|------------|
| 1                        | Brown      |
| 2                        | White      |
| 3                        | Blue       |
| 4                        | Black      |