



iSN-713-MRTU

Three-axis vibration sensor module (RS-485)

### **A** Features

- Three-axis vibration measurement
- Frequency range: 10 Hz to 1K Hz
- Amplitude range: ±8g
- Data Format:

-Acceleration(mg): RMS, Maximum, P-P

-Velocity(mm/s): RMS

-Top 10 spectrum values(Amplitude/Frequency), Crest Factor

Supported Modbus RTU Slave protocol









## **■** Introduction

The iSN-713-MRTU module is a three-axis vibration detection device. It has a built-in MEMS accelerometer, so it can easily realize equipment vibration monitoring. The module supports one RS-485 communication interface with Modbus RTU slave protocol, the user can transmit Modbus RTU commands to read the sensor's data by RS-485 interface. The iSN-713-MRTU is suitable for real-time vibration detection in critical locations for factory monitoring applications, such as production line equipment, motors, and pumps, etc., where there is a need to monitor any vibration application.

## Applications









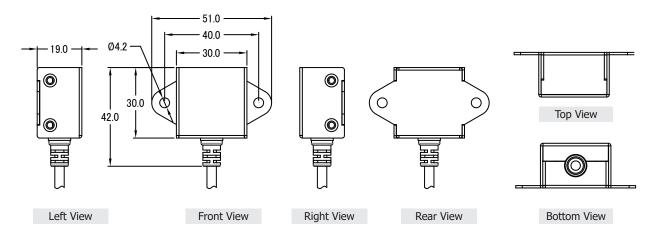


### **■ System Specifications**

Vibration Measurement			
Sensor Type	3-axis MEMS		
Amplitude Range	±8g		
Frequency Range	10 Hz to 1K Hz		
COM Ports			
Ports	1 x RS-485(D+, D-)		
Baud Rate	2400, 4800, 9600, 19200, 38400, 57600, 115200 bps		
Protocol	Modbus RTU		
Power			
Input Range	+10 ~ +30 VDC		
Consumption	0.35 W@24VDC		
Mechanical			
Dimensions (mm)	51 x 30 x 19 (W x L x H)		
Installation	Wall-mount or magnet adsorption		
Environment			
Operating Temperature	25 °C ∼ +75 °C		
Storage Temperature	-30 ∼ +80°C		
Humidity	10 ~ 95% RH, Non-condensing		

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# **■** Dimensions (Units: mm)

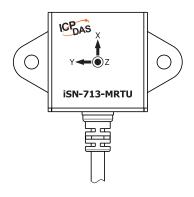


# **■ Pin Assignments**

## Power and RS-485 Connector

CONN	COLOR	Pin Assignment
1	White	D-
2	Red	VCC
3	Black	GND
4	Green	D+

# **Appearance**



# Ordering Information

**iSN-713-MRTU CR** Three-axis vibration sensor module (RS-485)(RoHS)

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