iSN-711-MRTU

Single axis vibration sensor module (RS-485)

Features

- 1-axis MEMS vibration measurement
- Suitable for low frequency vibration measurement
- Support Modbus RTU slave protocol
- Data Format:
  - Acceleration: RMS, Maximum, P-P
  - Velocity: RMS
  - Displacement: P-P
  - Crest Factor
  - Top 20 spectrum values(Magnitude/Frequency)
- Vibration eigenvalues threshold alarm function

Introduction

The iSN-711-MRTU module is an intelligent 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-711-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

Vibration monitoring
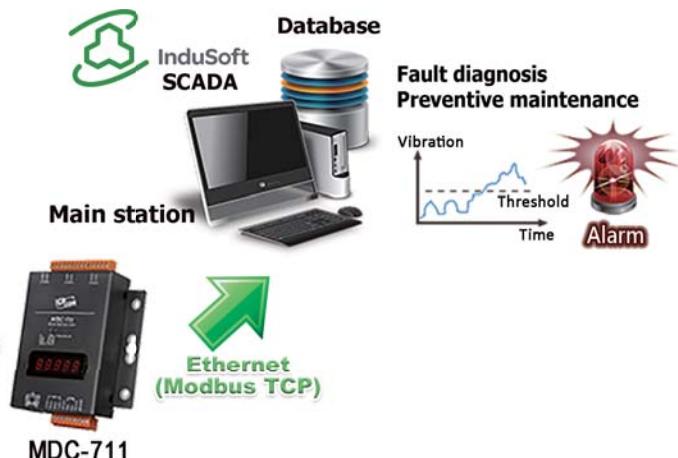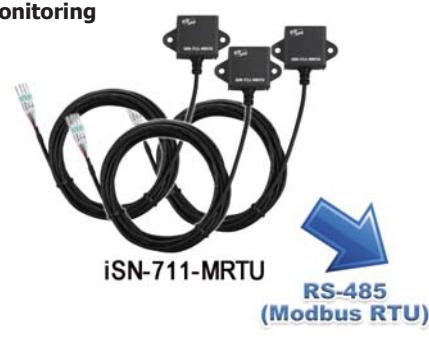
System Specifications

| Vibration Measurement	
Sensor Type	1-axis MEMS
Amplitude Range	±8g
Frequency Range	6 Hz to 1K Hz
COM Ports	
Ports	1 x RS-485(D+, D-)
Baud Rate	9600, 19200, 38400, 57600, 115200 bps
Data Format	N, 8, 1
Protocol	Modbus RTU
Power	
Input Range	+10 ~ +30 VDC
Consumption	0.3 W
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 ~ 90% RH, Non-condensing

■ Dimensions (Units: mm)

Left View	Front View	Right View	Rear View	Top View / Bottom View
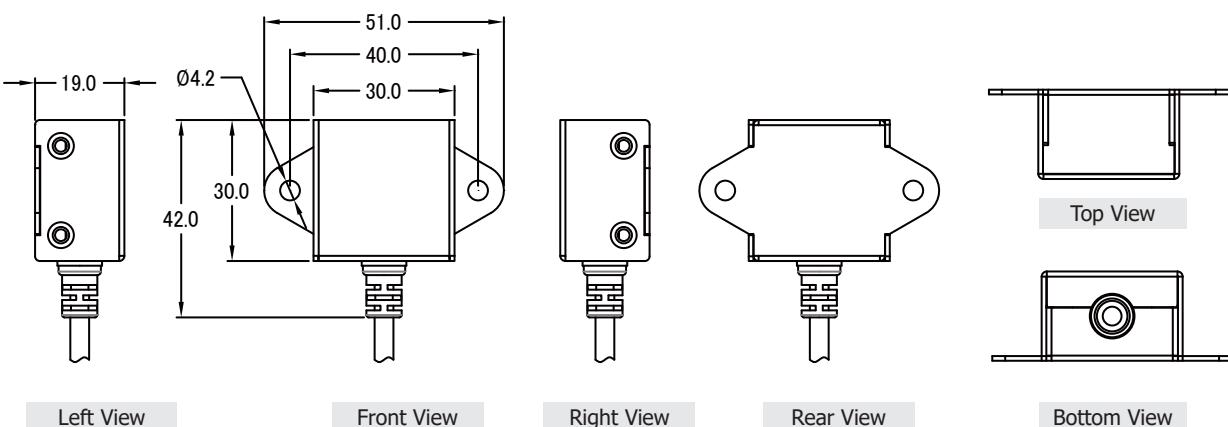
■ Pin Assignments

Power and RS-485 Connector

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

■ Appearance
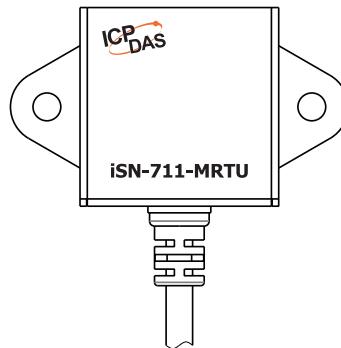
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■ Ordering Information

iSN-711-MRTU CR	Single axis vibration sensor module (RS-485)(RoHS)