



## iSN-711-MRTU-IP68/ iSN-713-MRTU-IP68

IP68 Single-axis/Three-axis vibration sensor module (RS-485)

### Features

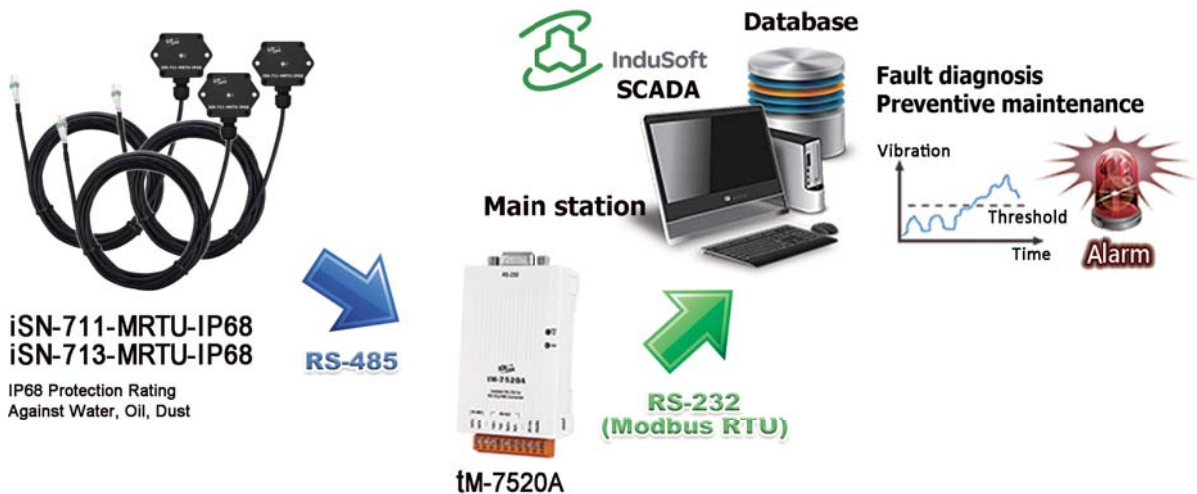
- 1-axis / 3-axis MEMS vibration measurement
- Suitable for low frequency vibration measurement
- Support Modbus RTU slave protocol
- Data Format:
  - Acceleration: RMS, Maximum, P-P
  - Velocity: RMS
  - Displacement: P-P
  - Crest Factor
  - Top 20 spectrum values(Magnitude/Frequency)
- Vibration eigenvalues threshold alarm function
- IP68 enclosure rating



### Introduction

The iSN-71x-MRTU-IP68 series are designed for industrial vibration measurement applications in harsh environments. With the IP68 protection rating, the device has even more protection against water, oil, dust, and much more. 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 Vibration measurement data by RS-485 interface. The iSN-71x-MRTU-IP68 series are suitable for real-time vibration detection in critical locations for factory monitoring applications, such as production line equipment, motors, pumps, etc., where there is a need to monitor any vibration application.

### Applications

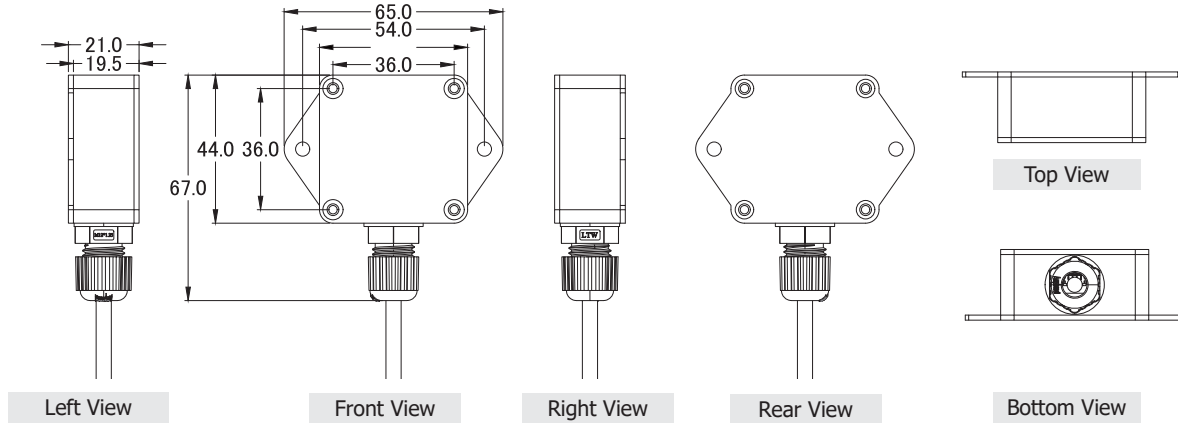


### System Specifications

Model	iSN-711-MRTU-IP68	iSN-713-MRTU-IP68
<b>Vibration Measurement</b>		
Sensor Type	1-axis MEMS	3-axis MEMS
Amplitude Range	±8g	
Frequency range	6 Hz to 1K Hz	
<b>COM Ports</b>		
Ports	1 x RS-485(D+, D-)	
Baud Rate	9600, 19200, 38400, 57600, 115200 bps	
Data Format	N, 8, 1	
Protocol	Modbus RTU	
<b>Power</b>		
Input Type	+10 ~ +30 VDC	
Consumption	0.3 W	

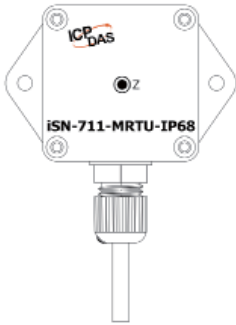
Model	iSN-711-MRTU-IP68	iSN-713-MRTU-IP68
<b>Mechanical</b>		
Dimensions (mm)	65 x 44 x 21 (W x L x H)	
Ingress Protection Rating	IP68	
Installation	Wall-mount or magnet adsorption	
<b>Environment</b>		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-30 ~ +80°C	
Humidity	10 ~ 95% RH, Non-condensing	

## ■ Dimensions (Units: mm)

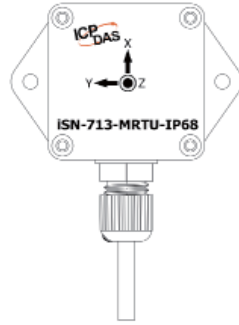


## ■ Appearance

**iSN-711-MRTU-IP68**



**iSN-713-MRTU-IP68**



## ■ Pin Assignments

**Power and RS-485 Connector**

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

## ■ Ordering Information

<b>iSN-711-MRTU-IP68 CR</b>	IP68 Single-axis vibration sensor module (RS-485)(RoHS)
<b>iSN-713-MRTU-IP68 CR</b>	IP68 Three-axis vibration sensor module (RS-485) (RoHS)

## ■ Related Products

<b>iSN-701X CR</b>	Modbus TCP, Vibration signal to Current converter, 1 channel (RoHS)
<b>iSN-701X-MTCP CR</b>	Modbus TCP, Vibration signal to Modbus slave converter, 1 channel (RoHS)
<b>iSN-711-MRTU CR</b>	Single axis vibration sensor module (RS-485)(RoHS)
<b>iSN-713-MRTU CR</b>	Three-axis vibration sensor module (RS-485)(RoHS)