



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

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

Features

- Single-axis/Three-axis vibration measurement
- Frequency range: 10 Hz to 1K Hz
- Amplitude range: $\pm 8g$
- 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
- 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



iSN-711-MRTU-IP68
iSN-713-MRTU-IP68

IP68 Protection Rating
Against Water, Oil, Dust



RS-485

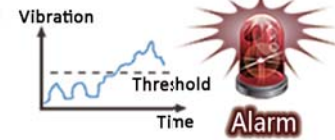


InduSoft
SCADA

Database



Fault diagnosis
Preventive maintenance



Main station



RS-232
(Modbus RTU)



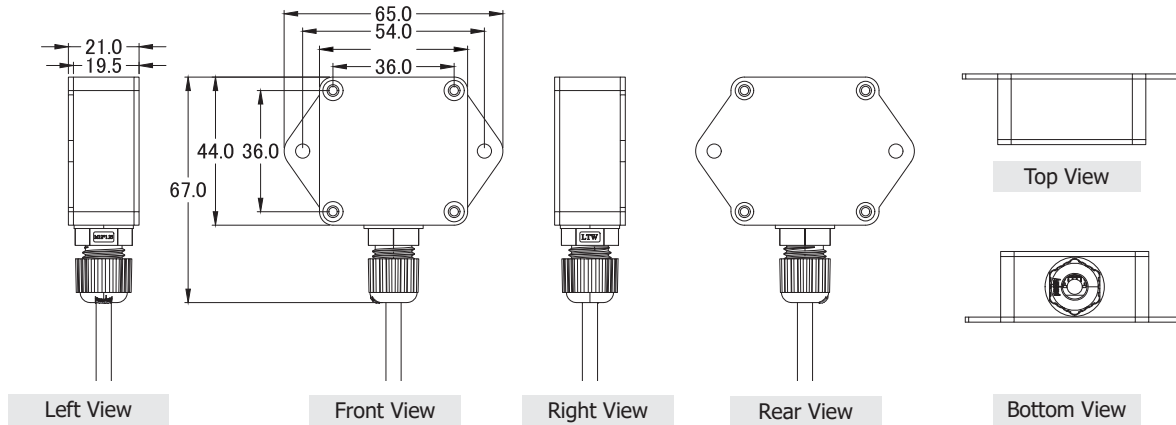
tm-7520A

System Specifications

Model	iSN-711-MRTU-IP68	iSN-713-MRTU-IP68
Vibration Measurement		
Sensor Type	1-axis MEMS	3-axis MEMS
Amplitude Range	$\pm 8g$	
Frequency range	10 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 Type	+10 ~ +30 VDC	
Consumption	0.3 W	

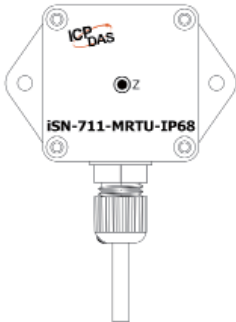
Model	iSN-711-MRTU-IP68	iSN-713-MRTU-IP68
Mechanical		
Dimensions (mm)	65 x 44 x 21 (W x L x H)	
Ingress Protection Rating	IP68	
Installation	Wall-mount or magnet adsorption	
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-30 ~ +80°C	
Humidity	10 ~ 95% RH, Non-condensing	

■ Dimensions (Units: mm)

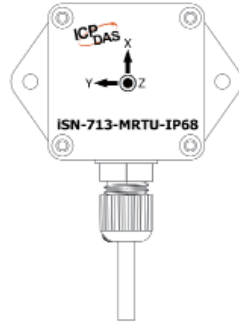


■ Appearance

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

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

■ Related Products

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