



iSN-701X-mA/iSN-701X

Vibration Signal Converter

Features

- Dynamic range: $\pm 10V$
- Built-in 4 mA excitation current
- Support multiple sampling rate: 200kHz/100kHz/50kHz/20kHz/10kHz/5kHz
- LED indicators for sensor open and normal
- Data Format: RMS, Maximum, P-P, Crest Factor, FFT, Velocity
- Support Modbus TCP/RTU slave protocol
- Converts vibration signals into current signals representing multiple feature values (iSN-701X-mA)



Introduction

The iSN-701X-mA series are vibration signal converter. Both of them have a built-in 4 mA excitation current to power the integrated electronic piezoelectric (IEPE) accelerometers and 16-bit A/D Converter, and provide a sampling rate of up to 200kHz. The iSN-701X series convert Vibration signals into multiple feature values. iSN-701X-mA outputs current representing vibration feature values. Users also can obtain the feature values through the Modbus TCP/Modbus RTU by using iSN-701X. The iSN-701X series are recommended as your best choice for vibration monitoring and measurement.

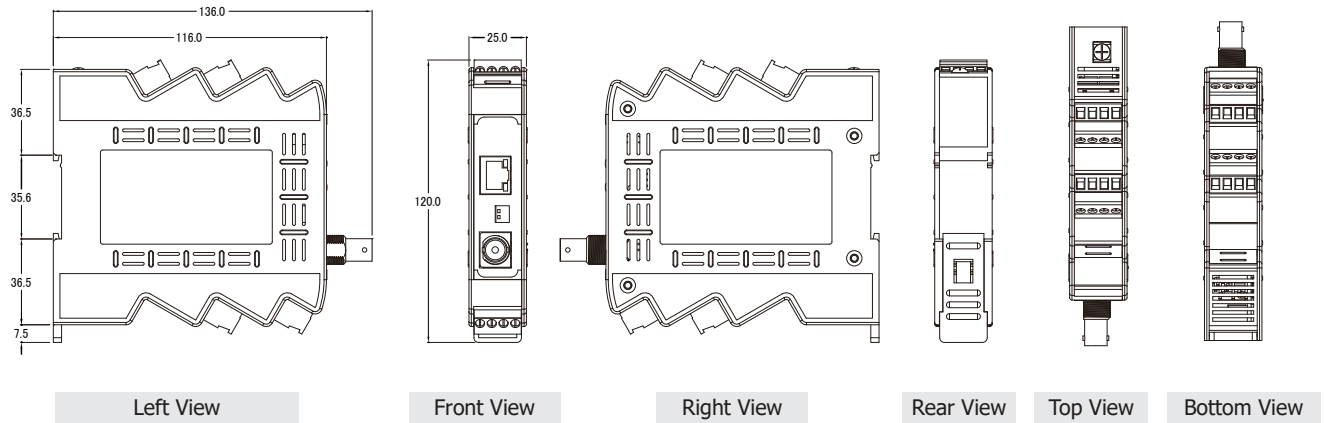
Applications

- Big data analysis
- System monitoring
- Trend analysis
- Predictive maintenance

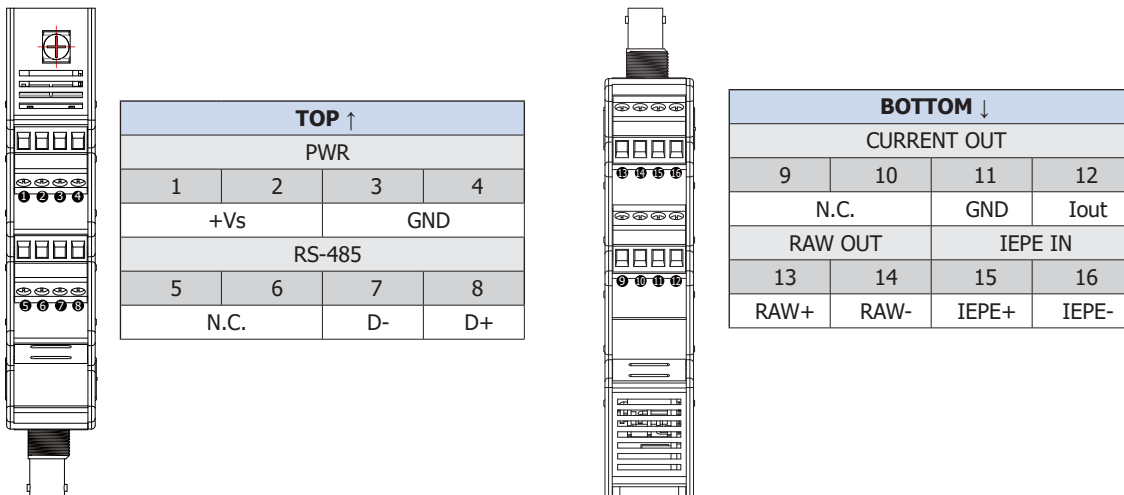
System Specifications

| Model | iSN-701X-mA | iSN-701X |
|-----------------------|--------------------------------------|----------|
| LED Indicators | | |
| Status | 1 X PWR, 1 X IEPE, 1 X DAQ | |
| Analog Input | | |
| Channels | 1 | |
| Type | IEPE | |
| Range | Voltage: $\pm 10 V$ Current: 4 mA | |
| Resolution | 16 bit | |
| Sampling Rate | 5, 10, 20, 50, 100, 200 (kHz) | |
| Analog Output | | |
| Channels | 1 | - |
| Type | Current x 1 | - |
| Range | 0~20mA, 4~20mA (Software Selectable) | - |
| COM Ports | | |
| Ports | 1 x RS-485 | |
| Baud Rate | 115200 bps Max. | |
| Protocol | Modbus RTU | |
| Ethernet | | |
| Ports | 1 x RJ-45, 10/100Base-T(X) | |
| Protocol | Modbus TCP | |
| Power | | |
| Input Range | +10 ~ +30 VDC | |
| Consumption | 4.3 W | |
| Mechanical | | |
| Dimensions (mm) | 25 mm x 120 mm x 117 mm (W x L x H) | |
| Installation | Din-Rail | |
| Environment | | |
| Operating Temperature | -25 ~ +75 °C | |
| Storage Temperature | -30 ~ 80 °C | |
| Humidity | 10 ~ 90% RH, non-condensing | |

■ Dimensions (Units: mm)



■ Pin Assignments



■ Ordering Information

| | |
|-----------------------|--|
| iSN-701X-mA CR | Modbus TCP, Vibration signal to Current converter, 1 channel (RoHS) |
| iSN-701X CR | Modbus TCP, Vibration signal to Modbus slave converter, 1 channel (RoHS) |

■ Accessories

| | |
|----------------------------|--|
| iSN-701-F15-L030 CR | 1-axis accelerometer, Range 80g, Sensitivity 100mV/g, Frequency 15 kHz, includes 300 cm cable (RoHS) |
| iSN-701-F15-L060 CR | 1-axis accelerometer, Range 80g, Sensitivity 100mV/g, Frequency 15 kHz, includes 600 cm cable (RoHS) |
| iSN-701-MBase01 CR | Magnetic Base for iSN-701 series (RoHS) |