



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.

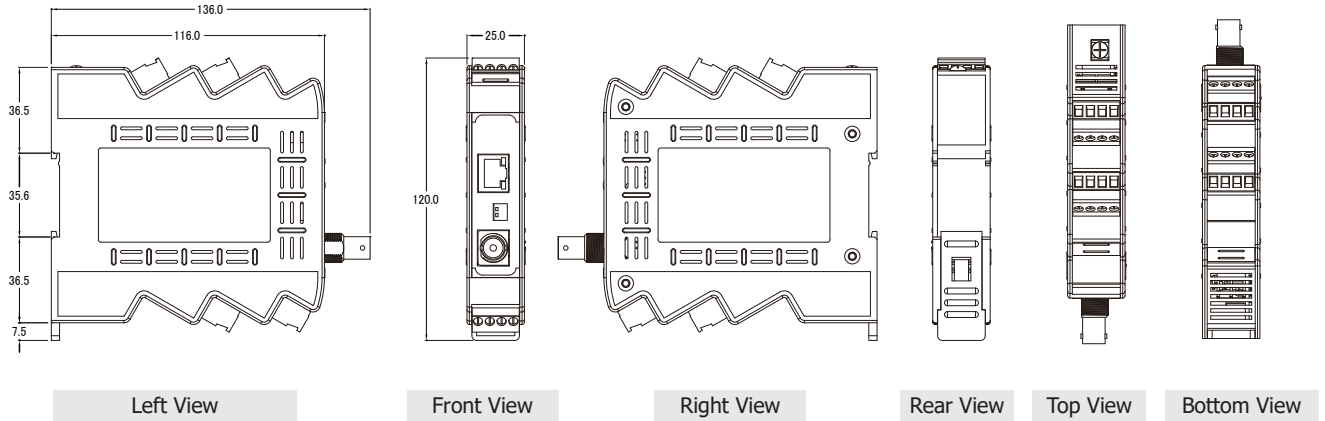
Applications

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

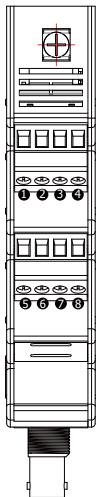
System Specifications

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	$+10 \sim +30 VDC$	
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	$-25 \sim +75 ^\circ C$	
Storage Temperature	$-30 \sim 80 ^\circ C$	
Humidity	10 ~ 90% RH, non-condensing	

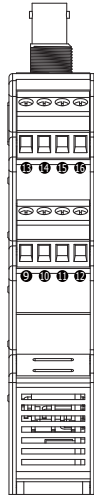
Dimensions (Units: mm)



Pin Assignments



TOP ↑			
PWR			
1	2	3	4
+Vs		GND	
RS-485			
5	6	7	8
N.C.		D-	D+



BOTTOM ↓			
CURRENT OUT			
9	10	11	12
N.C.		GND	Iout
RAW OUT		IEPE IN	
13	14	15	16
RAW+	RAW-	IEPE+	IEPE-

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)