



## iSN-701X/iSN-701X-MTCP

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)



### Introduction

The iSN-701X 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 outputs current representing vibration feature values. Users also can obtain the feature values through the Modbus TCP/Modbus RTU by using iSN-701X-MTCP. The iSN-701X series are recommended as your best choice for vibration monitoring and measurement.

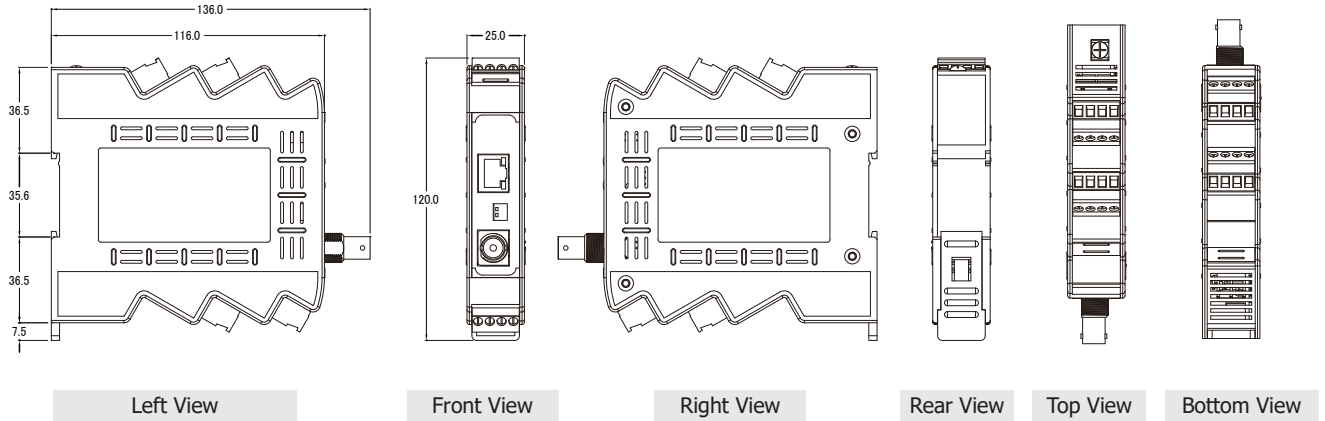
### Applications

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

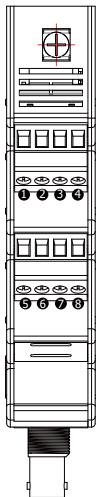
### System Specifications

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

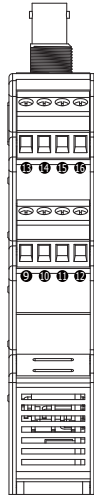
## Dimensions (Units: mm)



## 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

<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)

## Accessories

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