



## AR-300/AR-300-T/AR-400

Accelerometer Data Logger Device

### Features

- 2/3/4 simultaneous, 16-bit resolution ADC
- IEPE input, and built-in 3 mA excitation current
- Support sampling rate: 200kHz/125kHz/100kHz/50kHz/20kHz/10kHz/5kHz
- Max. Recording time: 30 m (5kHz)
- Flexible trigger modes: Push button trigger, Schedule trigger, analog threshold trigger, digital input trigger and software remote trigger
- Supports 4 to 32 GB micro SDHC type flash



### Introduction

The AR-200/AR-300-T/AR-400 series is a range of high-performance dynamic signal acquisition modules that are designed specifically for vibration monitoring and analysis. The maximum simultaneous sampling rate for each channel on the AR-200 is up to 200k-Hz, AR-300-T and AR-400 is up to 125k-Hz respectively. The AR series modules include a built-in 3mA excitation current to power the Integrated Electronics Piezo-Electric (IEPE) accelerometers and a 16-bit A/D converter. The data acquired by the AR series modules are saved on a Micro SD card that can be used for offline vibration analysis. ICP DAS also provides a utility that can be installed on the Host PC that can be easily configured for different triggering modes, as well as changing the sampling rate, and scheduling the sampling time for various applications using the development tools. Consequently, the AR series modules are recommended as your best choice for vibration monitoring and measurement.

### Applications

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

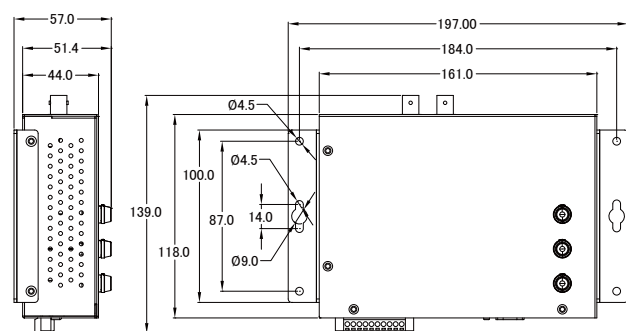
### System Specifications

Model	AR-200	AR-300-T	AR-400
LED Indicators			
Status	1 x PWR 1 x DAQ 1 x SD		
Temperature Measurement			
Sensor Type	-	Thermistor	
Channels	-	1	-
Range	-	0 °C ~ +80 °C	-
Accuracy	-	±2 °C	-
Installation	-	Wall-mount	-
Analog Input			
Channels	2 simultaneous sampling	3 simultaneous sampling	4 simultaneous sampling
Type	IEPE		
Range	Voltage: ±10 V Current: 3 mA		
Resolution	16 bit		
Sampling Rate	5, 10, 20, 50, 100, 125, 200 (kHz)		
Digital Input			
Channels	2, Dry Contact: Source x 1 Wet Contact: Sink or Source x 1		
ON Voltage Level	Dry: Close to GND Wet: +10 VDC to +50 VDC		

Model	AR-200	AR-300-T	AR-400
OFF Voltage Level	Dry: Open Wet: +4 VDC max		
Relay Output			
Channels	Form A x 1		
Type	Power Relay		
Contact Rating	5A@250 VAC (47 ~ 63 Hz) 5A@30 VDC		
Operate Time	10 ms		
Release Time	5 ms		
Electrical Endurance	100,000 times min		
Mechanical Endurance	20,000,000 times min		
Ethernet			
Ports	1 x RJ-45, 10/100Base-T(X)		
Power			
Consumption	4.3 W		
Mechanical			
Dimensions (mm)	197 x 139 x 57 (W x L x H)		
Installation	Wall Mount		
Environmental			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-30 ~ +80°C		
Humidity	10 ~ 90% RH, Non-condensing		

## ■ Dimensions (Units: mm)

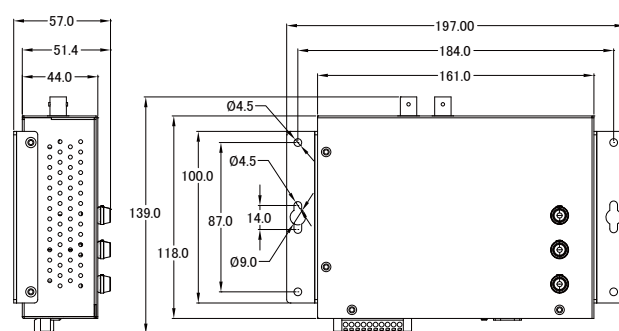
**AR-200**



Left View

Front View

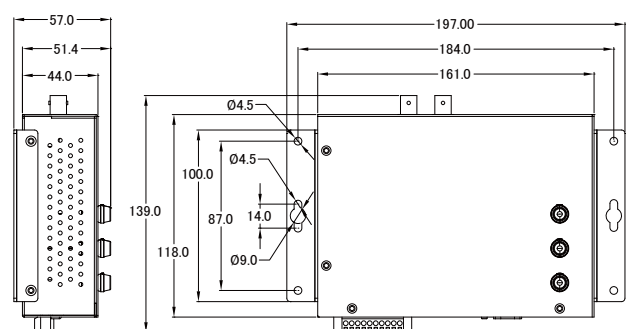
**AR-300-T**



Left View

Front View

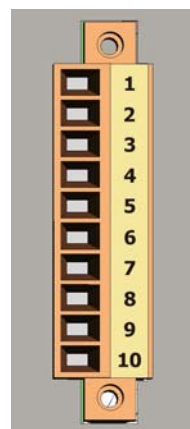
**AR-400**



Left View

Front View

## ■ Pin Assignments



PIN No.	Name
1	F.G
2	GND
3	+Vs
4	RL.NO
5	RL.COM
6	D-
7	D+
8	ISO.GND
9	DI
10	DI.COM

## ■ Ordering Information

<b>AR-200 CR</b>	Accelerometer Data Logger Device, 2-ch IEPE Input (RoHS)
<b>AR-300-T CR</b>	Accelerometer Data Logger Device, 3-ch IEPE Input, 1-ch Thermistor Input (RoHS)
<b>AR-400 CR</b>	Accelerometer Data Logger Device, 4-ch IEPE Input (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)
<b>CA-TM-P100-L020 CR</b>	NTC Thermistor, Epoxy Resin Cable, 2M (-40°C~+80°C) (RoHS)
<b>CA-TM-P100-L050 CR</b>	NTC Thermistor, Epoxy Resin Cable, 5M (-40°C~+80°C) (RoHS)
<b>CA-TM-M100-L050P CR</b>	NTC Thermistor, Epoxy Resin to Connector Cable, 5M (-40°C~+80°C) (RoHS)
<b>CA-TM-M200-L050P CR</b>	NTC Thermistor, Magnet to Connector Cable, 5M (-40°C~+105°C) (RoHS)