# AR Series Products

**Accelerometer Data Logger Device** 





AR-200 / AR-400 is a high-performance dynamic signal acquisition module equipped with 2 / 4 analog input channels providing simultaneous-sampling at up to 200 / 125 kHz per channel. The module built-in 16 bit resolution ADC and 3 mA excitation current to measure IEPE sensors, and save data in SDHC type flash. We also provide flexible trigger modes, sample rate, and recording time for efficient data acquisition, making it ideal for signal measurement in vibration applications.

#### Features

- 2 or 4 simultaneous, 16-bit resolution ADC
- Support 2 or 4 IEPE input, and built-in 3 mA excitation current
- AR-200 support sample rate: 200kHz \ 100kHz \ 50kHz
- AR-400 support sample rate: 125kHz \ 100kHz \ 50kHz
- Max. Recording time : 120 seconds
- Dynamic range : +/- 10V
- Flexible trigger modes: Push button trigger 
   Schedule
   trigger 
   analog threshold trigger 
   digital input trigger and
   utility remote trigger
- Supports 4 to 32 GB micro SDHC type flash
- Provide 2-ch DI and 1-ch Relay
- Provide LED indicators
- Wide range of power input (+10 ~ +30 VDC) and operating temperature (-25 ~ +75 °C)

#### Utility

- Provide device search function.
- Support trigger mode configuration
- Support RTC calibration
- Provide recording file(\*.ar) convert to various file type (\*.xls, \*.csv, \*.txt)
- Support utility remote trigger mode
- Show system event log

			IP		м	ask	Gateway	MAC
AR-400 AR-4	00 Alias		192.16	8.255.1	.00 25	5.255.0.0	192.168.0.254	00:00:00:00:00:00
Q Search	Netw	ork Sett	ings	RTC	Calibratio	on	Ø Conne	ct DisConnec
nformation irmware Version : rigger Mode	v1.00	Status :	Idle	C. ata		SD C	Card : 😝 🛛 Mercu	ury battery : 😝
ngger wode Mic	to SD Card	Remo	te rnggel	syster	m Log L	ownload Lis	4 	
M schedule ing	ger		Start	Rate	Time '	Push Bu	Dete (KUZ): 125	DAO Time: 60
		▶ 1	19:00	50	5	Sample	Rate (KHZ). 123	DAQ IIIIe. 00
Sample Rate (KH	7) 50	-	10:10	50	5	- 🗆 Three	shold Trigger (±10	239 mV)
Sample Rate (KH	Z): 50 ~	2	19:10	30				
Sample Rate (KH Start : 19:00	Z): 50 ~	2	19:10	50	5	Sample	Rate (KHZ): 125	<ul> <li>DAQ Time: 60</li> </ul>
Sample Rate (KH Start : 19:00	Z): 50 ~	2 3 4	19:10 19:20 19:30	50 50 50	5 5	Sample	Rate (KHZ): 125	DAQ Time: 60
Sample Rate (KH Start : 19:00 DAQ Time: 5	Z): 50 ~ ) ‡ \$ Sec.	2 3 4 5	19:10 19:20 19:30 19:40	50 50 100	5 5 5	Sample Upper b	Rate (KHZ): 125	DAQ Time: 60
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Sample Rate (KH Start : 19:00 DAQ Time: 5	Z): 50 v Sec. Modify	2 3 4 5 6 7	19:10 19:20 19:30 19:40 19:50 20:00	50 50 100 100 100	5 5 5 5 5	Sample Upper b	Rate (KHZ): 125 ound: 10000 🗘	DAQ Time: 60

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





## Hardware Specifications

Module Name	AR-200	AR-400			
<b>Analog Input Interface</b>					
Channels	2 (simultaneous sampling)	4 (simultaneous sampling)			
ADC Resolution	16 bit				
Sample rate (kHz)	50, 100, 200	50, 100, 125			
Dynamic range	+/- 10V				
IEPE	3 mA				
Trigger mede	Push button trigger  Schedule trigger  Analog threshold trigger				
	Digital input trigger  Vtility Remote trigger				
Connector	BNC				
Ethernet Interface					
Controller	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX)				
Connector	RJ-45 with LED indicator				
SD Card Interface					
Storage Media	Micro SDHC type flash – support 4 to 32 GB				
Recording Format	Binary				
LED					
LED indicator	PWR LED, DAQ_ST LED, SD_ST LED				
Power					
Power supply	Unregulated $+10 \sim +30 V_{DC}$				
Protection	Power reverse polarity protection, Over-voltage brown-out protection				
Power Consumption	4.3W				
Mechanism					
Installation	Wall Mount				
Dimensions	197 mm x 139 mm x 57 mm (W x L x H)				
Environment					
Operating Temp.	-25 ~ 75 °C				
Storage Temp.	-30 ~ 80 °C				
Humidity	10 ~ 90% RH, non-condensing				

## Application

## Vibration Signal Measurement



#### Order Information

AR-200 CR	2-Channels Accelerometer Data Logger device (RoHS)
AR-400 CR	4-Channels Accelerometer Data Logger device (RoHS)