

Analog Input Module

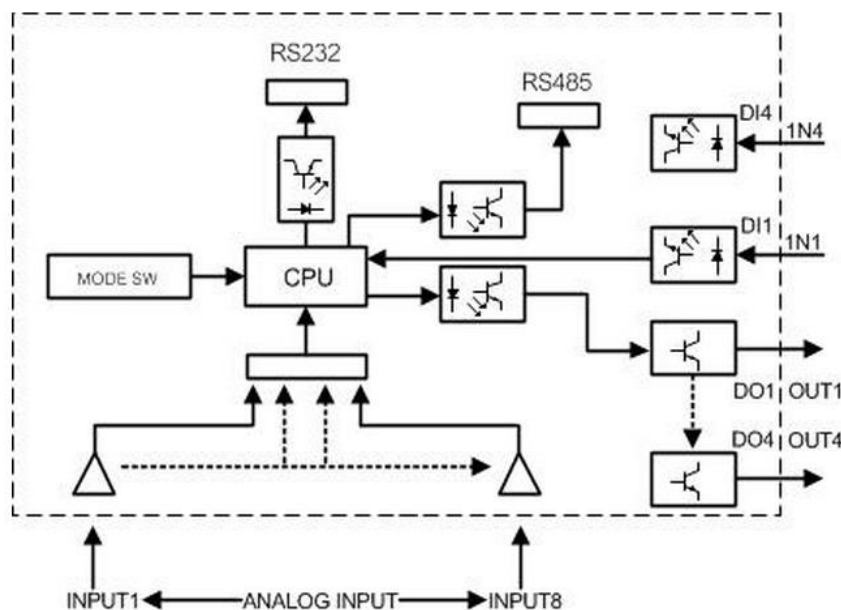
AI210



- Programmable Input Type
- 8 Analog Input Channels
- 4 Digital Input Channels
- 4 Digital Output Channels
- RS-232, RS-485 Isolated

Analog Input Module AI210 has 8 Analog Input, 4 Digital Input and 4 Digital out. In addition, Analog Input is programmable input, user can set to use with various kind of sensor such as Thermocouple, RTD and Voltage etc. AI210 provides RS-232 connector and RS-485 connector which suitable for developing PC software, PLC, and touch screen display.

AI210 provides RS-232 connector and RS-485 connector which suitable for developing PC software, PLC, and touch screen display. AI210 has MODBUS ASCII protocol, MODBUS RTU protocol, moreover DDE Server to connect with windows program. Data file can be converting to MS word or MS excel using utility program.



Specifications

Serial Interface

Serial Standards:

RS232 Connector RJ12 6 Pin

RS485 (Isolated) 2 Pin Terminal Block

Loading: RS485 Max 32 Unit

Distance:

RS232 Length 15 m.

RS485 Length 1 Km.

Protocol: MODBUS (ASCII, RTU),

Wisco ASCII

Support Software: Citect, Wonderware,

Lab View, Fix, Genesis, etc.

Serial Parameter

Baud Rate: 4800, 9600, 19200, 57600

Data Bits: 8

Stop Bits: 1

Parity: None

Analog Input

Number of Channel: 8 Channels up to

24 Channels (EX24 Module)

Input Type: Programmable Input

Input Range:

Thermocouple (R, S, K, E, J, T, B)

RTD (PT100)

Voltage mVDC (0 to 100 mVDC)

Voltage (0 to 10, 0 to 5 VDC)

Current (0 to 20, 0 to 40 mA)

ADC Resolution: 16 Bits

Isolation: Relay Isolated

Digital Input

Number of Channel: 4 Channels

Sensor Type: wet Contact (Opto Isolated)

wet Contact (DI to GND):

ON: 12 to 24 VDC

OFF: 0 to 3 VDC

Digital Output

Number of Channel: 4 Channels

Output Type: NPN Open Collector

Recording

Recording Interface: 1 Sec - 18 Hours

(Programmable)

record Mode: Stop When Full or Roll Over

Data Format: Can be Exported to MS Excel

Power Requirements

Power Supply: 85 to 230 VAC

(12 to 35 VDC Optional)

Power Consumption

Standby: 280 mA @ 12 VDC (3.5 W)

Start Record: 350 mA @ 12 VDC (4.5 W)

Environmental Limits

Operating Temperature: 0 to 55 °C

Operating Humidity: 5 to 95% RH

Storage Temperature: 0 to 70 °C

Physical Characteristics

Dimension: W160 x H90 x D60 mm.

Mounting: DIN Rail

Warranty

Warranty Period: 5 year

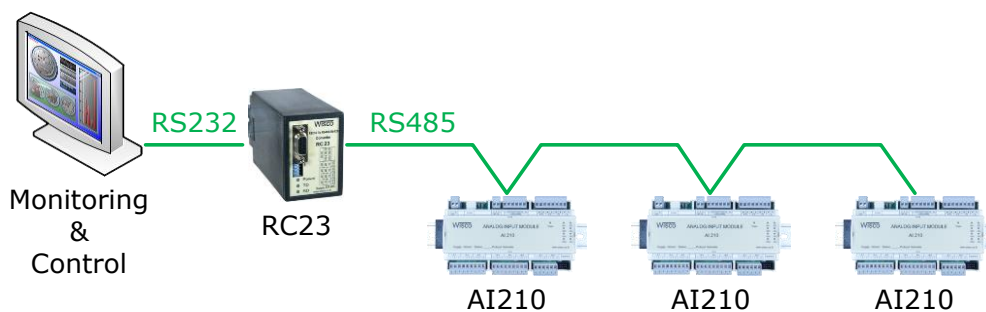
Ordering Information:

 Specify Power Supply

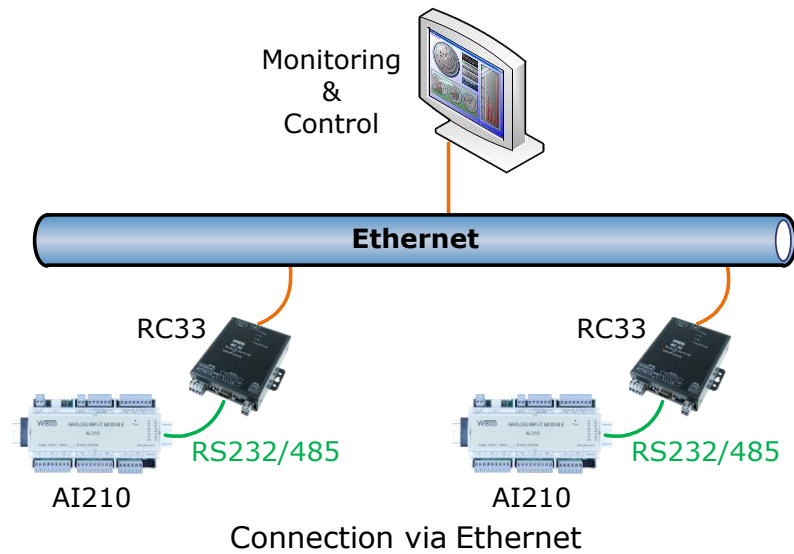
Example AI210/85-230VAC

Package Checklist

1. AI210
2. RS-232 Cable
3. Resistor 250 Ω
4. Manual
5. CD Software



Connection via RS485



Code	Input Type	Measuring Range	Resolution	Accuracy (%FS) @25 °C	
00	Not Use	-	-	-	
01	Thermocouple	R	0 – 1700 °C	1 °C	± 0.2% (3.4 °C)
02		S	0 – 1700 °C	1 °C	± 0.2% (3.4 °C)
03		K	(-)250.0 – 1300.0 °C	0.1 °C	± 0.2% (2.6 °C)
04		E	0.0 – 1000.0 °C	0.1 °C	± 0.2% (2.0 °C)
05		J	(-)200.0 – 700.0 °C	0.1 °C	± 0.2% (1.4 °C)
06		T	(-)250.0 – 400.0 °C	0.1 °C	± 0.2% (0.8 °C)
07		B	0 – 1800 °C	1 °C	± 0.2% (3.6 °C)
08		R.T.D. Pt100	(-)200.0 – 800.0 °C	0.1 °C	± 0.2% (1.6 °C)
09	Voltage(mV) 0 – 100	0.00 – 100.00 mV	0.01 mV	± 0.02% (0.02 mV)	
10	Voltage (V)	0 – 5	0.000 – 5.000 V	0.001 V	± 0.04% (0.002 V)
11		0 – 10	0.000 – 10.000 V	0.001 V	± 0.02% (0.002 V)
12	Current (mA)	0 – 20	0.00 – 20.00 mA	0.01 mA	± 0.1% (0.02 mA)
13		0 – 40	0.00 – 40.00 mA	0.01 mA	± 0.05% (0.02 mA)

AI20 Specification Document