

Product Type

108-A222

8-channel single analog input and 4-channel analog output module

Specifications

Size: (L124 x W72 x H53 mm)

Series Interface: Half duplex RS-485 with transformer isolation

Cable Type: CAT5 UTP/STP Ethernet Cable

Surge Protection: 10KV

Transfer Rate: 2.5Mbps, 5Mbps, 10Mbps, 20Mbps

IO isolation Voltage: 2.5KVrms

Input Effective Resolution: 12-bit

Input Impedance: 20MΩ.

Input Range: 0~10V, 4~20mA

Input Mode: Single Ended or Differential

Output Impedance: 0.3Ω.

Output Effective Resolution: 12-bit

Output Range: 0~10V

Sampling Rate: 10ms/Ch.

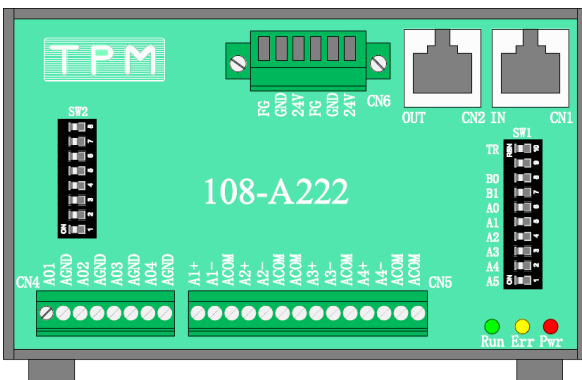
Accuracy: 0.1% or better

Power Input Voltage: 18~36V DC.

Power Consumption: 3W typical

Working Temperature: 0 ~ 60°C

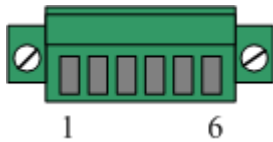
I/O Interfaces



Label	Function
CN1	Motion.NET Communication Control Connector
CN2	Motion.NET Communication Control Connector
CN4	Channel #0 ~ #3 Output Connector
CN5	Channel #0 ~ #7 Input Connector
CN6	Power Connector
SW1	Node Number and Configuration Settings
LED1	LED Of Communication Active
LED2	LED Of Communication Error
LED3	LED Of DC Power Supply (Normally Light On)

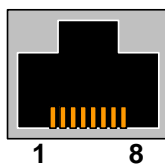
Pin Assignment of Connectors

- CN6: External power input



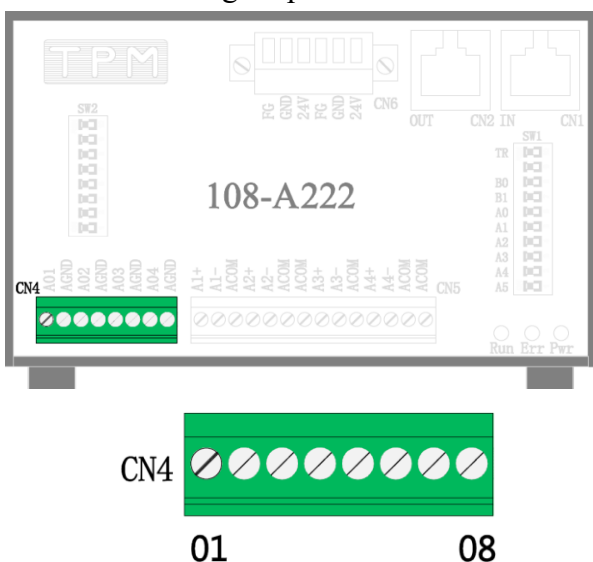
Pin	Label	Function
1	24V	DC 24V
2	GND	DC 24V ground
3	FG	Field ground
4	24V	DC 24V
5	GND	DC 24V ground
6	FG	Field ground

- CN1/CN2: Motionnet communication connectors



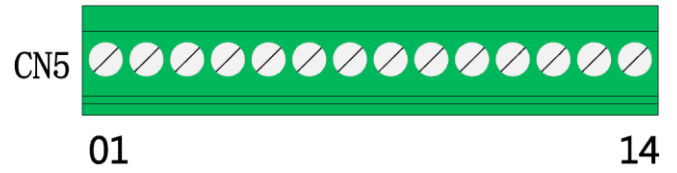
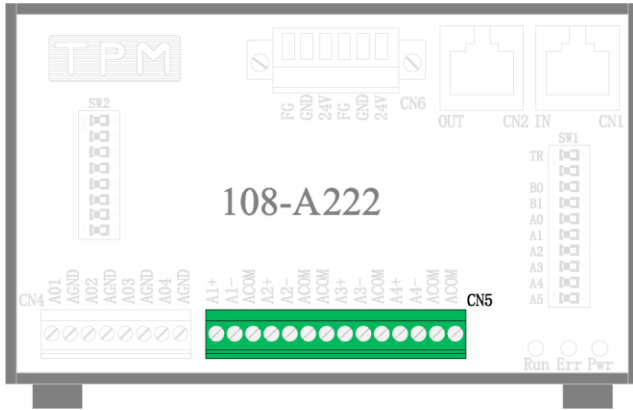
Pin	Label	Function
1	NC	Reserved
2	NC	Reserved
3	D+	Differential D+ signal
4	NC	Reserved
5	NC	Reserved
6	D-	Differential D- signal
7	NC	Reserved
8	NC	Reserved

- CN4: Analog output connector



Pin	Label	Function
1	AO1	Channel #0 Voltage Output
2	AGND	Channel #0 AGND
3	AO2	Channel #1 Voltage Output
4	AGND	Channel #1 AGND
5	AO3	Channel #2 Voltage Output
6	AGND	Channel #2 AGND
7	AO4	Channel #3 Voltage Output
8	AGND	Channel #3 AGND

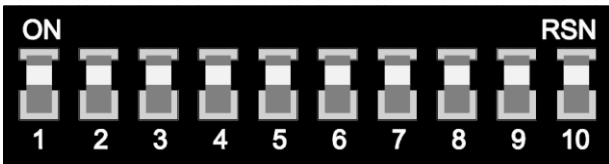
● CN5: Analog input connector



Pin	Label	Function
1	A1+	Channel #1 differential input(+)
2	A1-	Channel #1 differential input(-)
3	ACOM	Analog Common Ground
4	A2+	Channel #2 differential input(+)
5	A2-	Channel #2 differential input(-)
6	ACOM	Analog Common Ground
7	ACOM	Analog Common Ground
8	A3+	Channel #3 differential input(+)
9	A3-	Channel #3 differential input(-)
10	ACOM	Analog Common Ground
11	A4+	Channel #4 differential input(+)
12	A4-	Channel #4 differential input(-)
13	ACOM	Analog Common Ground
14	ACOM	Analog Common Ground

Pin	Label	Function
1	A1+	Channel #1 single-ended input
2	A1-	Channel #2 single-ended input
3	ACOM	Analog Common Ground
4	A2+	Channel #3 single-ended input
5	A2-	Channel #4 single-ended input
6	ACOM	Analog Common Ground
7	ACOM	Analog Common Ground
8	A3+	Channel #5 single-ended input
9	A3-	Channel #6 single-ended input
10	ACOM	Analog Common Ground
11	A4+	Channel #7 single-ended input
12	A4-	Channel #8 single-ended input
13	ACOM	Analog Common Ground
14	ACOM	Analog Common Ground

SW1: Slave ID and configuration settings dip switch



Pin	Label	Description	On	Off
1	A5	ID configuration	1	0
2	A4	ID configuration	1	0
3	A3	ID configuration	1	0
4	A2	ID configuration	1	0
5	A1	ID configuration	1	0
6	A0	ID configuration	1	0
7	B1	*Baud-Rate Setting	1	0
8	B0	*Baud-Rate Setting	1	0
9	–	Reserved	NC	NC
10	TR	Terminate Resistance	Enable	Disable

Note that node number = $32 \times A5 + 16 \times A4 + 8 \times A3 + 4 \times A2 + 2 \times A1 + A0$

The table below shows the settings of transfer rates. Default value is 10Mbps.

B0	B1	Transfer rate
OFF	OFF	20Mbps
ON	OFF	10Mbps
OFF	ON	5Mbps
ON	ON	2.5Mbps

SW2: Input Mode settings dip switch

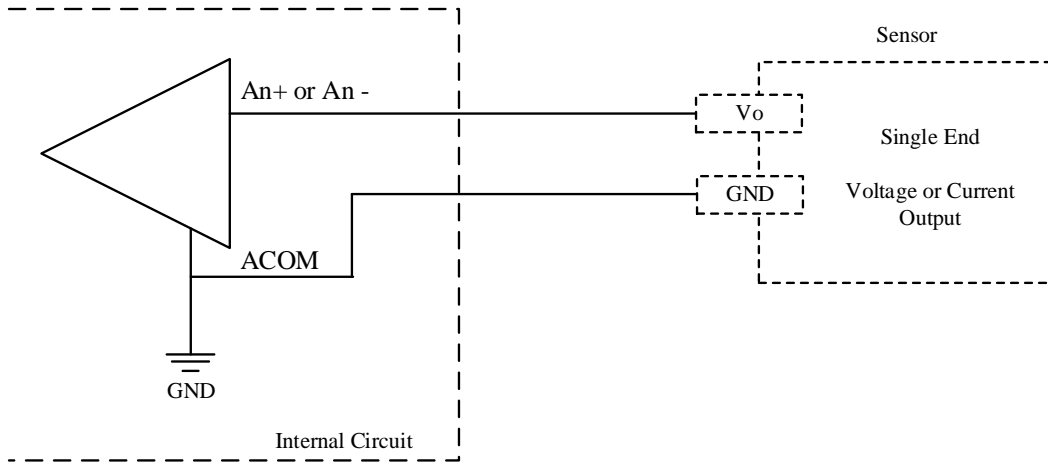
Default setting is voltage mode. (Must set all channels as voltage or current mode at the same time.)



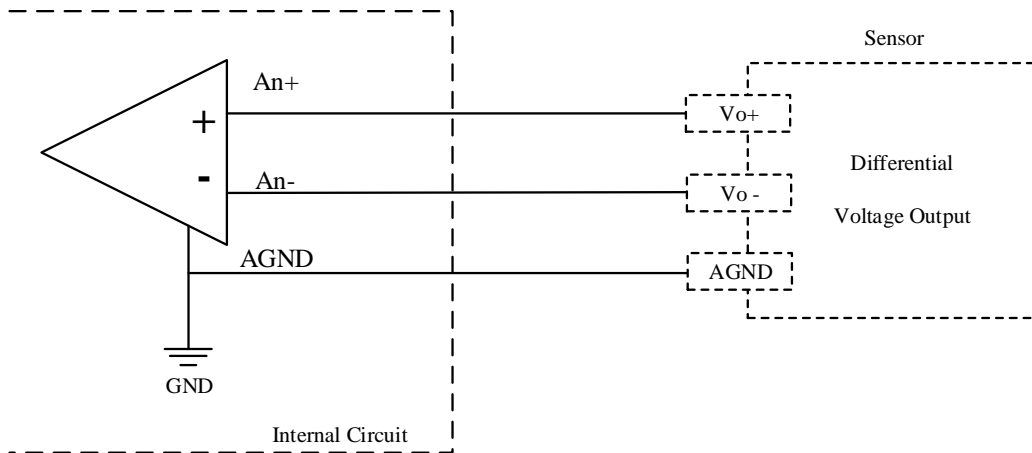
Pin	Description	On	Off
8	Channel #1	Current	Voltage
7	Channel #2	Current	Voltage
6	Channel #3	Current	Voltage
5	Channel #4	Current	Voltage
4	Channel #5	Current	Voltage
3	Channel #6	Current	Voltage
2	Channel #7	Current	Voltage
1	Channel #8	Current	Voltage

- Analog input signals

Single End Input Signal



Differential Input Signal



- Analog output signals

