



DESCRIPTION

- Can display various temperature or process values
- 7-segment display, 4 digits, clearly visible and 7-segment 1 digit Displays the Input Channel function
- Can select to receive up to 4 inputs in the same body
- Receive Thermocouple input, PT100, PTC, Current, Voltage
- Split into 4 Alarm (1 to 1)
- LED showing the alarm function
- Communicate with the computer via RS-485 Mod bus Protocol

TECHNICAL SPECIFICATION

Power Supply		90-250 VAC 50-60Hz 10-24VAC/VDC
Power Consumption		3VA
Display		7 Segment, 4 Digit, Size 0.56 Inch 7 Segment, 1 Digit, Size 0.39 Inch (Show Channel Input) 4 LED (Show alarm output)
Input	Channel Input	Isolate 4 Channel Input
	Thermocouple	K, J, R, T, N, S, E
	RTD	PT100
	Voltage	0-75mV, 0-150mV, 0-1VDC, 0-5VDC, 0-10VDC, ± 0-75mVDC, ±0-150mVDC, ±0-1VDC, ±0-5VDC, ±0-10VDC
	Current	0-20mA, 4-20mA
	Range	Please see detail in Table1
	Accuracy	±0.25 % of Full Scale @ Room Temperature (25 °C)
Sampling Time		500 mSec
Communication	Protocol	MODBUS RTU
	Baud Rate	1200,2400,4800,9600,19200,38400, 57600 bps
	Parity	None
	Stop Bits	1
	Data Bits	8
	Support Device Node	127
Output	Relay Alarm	4 Alarm 5A/250VAC
Ambient Operation	Temperature	-10 °C to 60 °C
	Humidity	85 % RH Non-Condensing
Ambient Storage	Temperature	-20 °C to 80 °C
	Humidity	85 % RH Non-Condensing
Protection Degree	Front Protection Rating	IP52
	Case Protection Rating	IP30
Installation		Panel Mounting
Material		ABS-V0
Size		48 x 96 x 80 mm.
Weight		240 g.

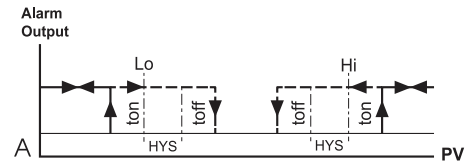
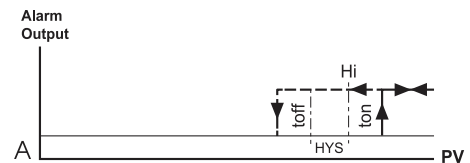
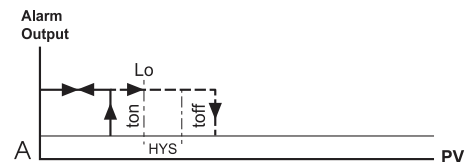
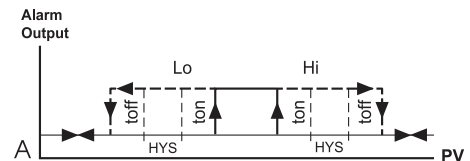
TABLE : SELECT SENSOR INPUT

Table 1. Select input sensors and setting range.

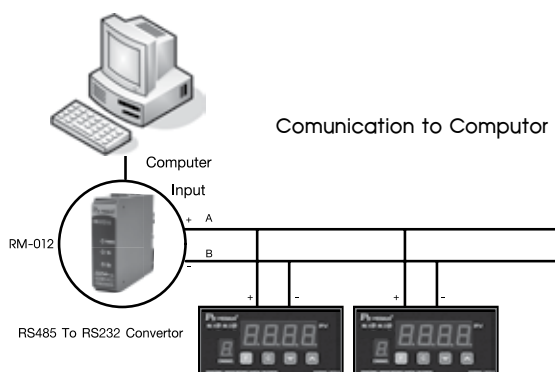
Symbol	Input Type	Setting Range/Display Range		
		Non-decimal point	Decimal point	
00	Thermocouple Type K	-200 ~1372 °C	-200.0 ~1372.0 °C	
		-328 ~2501 °F	-328.0 ~2501.0 °F	
01	Thermocouple Type J	-200 ~1200 °C	-200.0 ~1200.0 °C	
		-328 ~2192 °F	-328.0 ~2192.0 °F	
02	Thermocouple Type R	-50 ~1768 °C	-	
		-58 ~3214 °F	-	
03	Thermocouple Type T	-200 ~400 °C	-200.0 ~400.0 °C	
		-328 ~752 °F	-328.0 ~752.0 °F	
04	Thermocouple Type N	-200 ~1300 °C	-200.0 ~1300.0 °C	
		-328 ~2372 °F	-328.0 ~2372.0 °F	
05	Thermocouple Type S	-50 ~1768 °C	-	
		-58 ~3214 °F	-	
06	Thermocouple Type E	-200 ~1000 °C	-200.0 ~1000.0 °C	
		-328 ~1832 °F	-328.0 ~1832.0 °F	
07	Pt100	-200 ~850 °C	-200.0 ~850.0 °C	
		-328 ~1526 °F	-328.0 ~1526.0 °F	
10	DC 0-20mA	-19999 ~19999	-1999.9 ~1999.9	
11	DC 4-20mA			
20	DC 0-75mVDC			
21	DC 0-150mVDC			
22	DC 0-1VDC			
23	DC 0-5VDC			
24	DC 0-10VDC			
25	DC ± 0-75mVDC			-1.9999 ~1.9999
26	DC ± 0-150mVDC			
27	DC ± 0-1VDC			
28	DC ± 0-5VDC			
29	DC ± 0-10VDC			

ALARM OUTPUT

Stand-by sequence : After starting operation of step, alarm output does not turn on unless the process value reach the value of OFF position of alarm output.

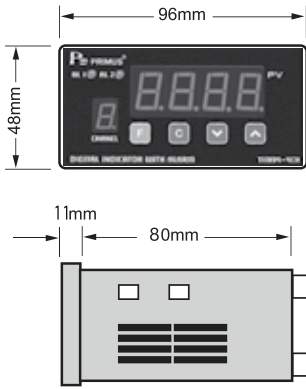
1. Absolute value High Low Band Alarm

2. Absolute value High Alarm

3. Absolute value Low Alarm

4. Absolute value High Low Band Alarm

SERIAL COMMUNICATIONS

The TIM-94N-4CH are equipped with a RS-485 serial communications interface to allow connection to computers or PLCs. MODBUS protocol is provide as stbandard communication. The user can connect TIM-94N-4CH as network up 127 meters.

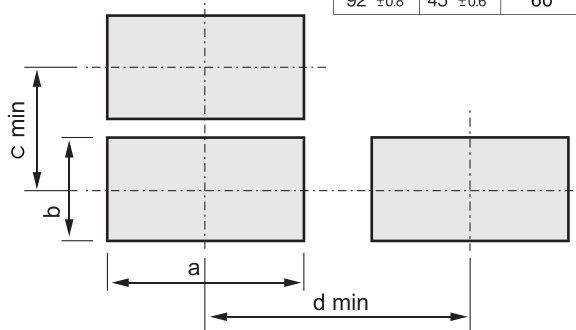

MODBUS PROTOCOL

- This MODBUS protocol has been implement in accordance with MODBUS.ORG MODBUS application.
- Protocol specification V1.1 with the following conditions applying.
- The following conditions apply.
- Baudrate can selected refer [Speed setting](#)
- The format is MODBUS RTU
- UART data can selected refer [Communication setting](#)
- Data is considered to be half duplex using 2 wire

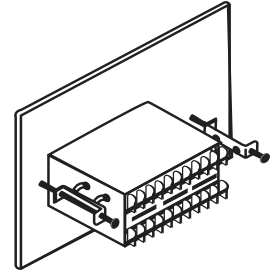
DIMENSION



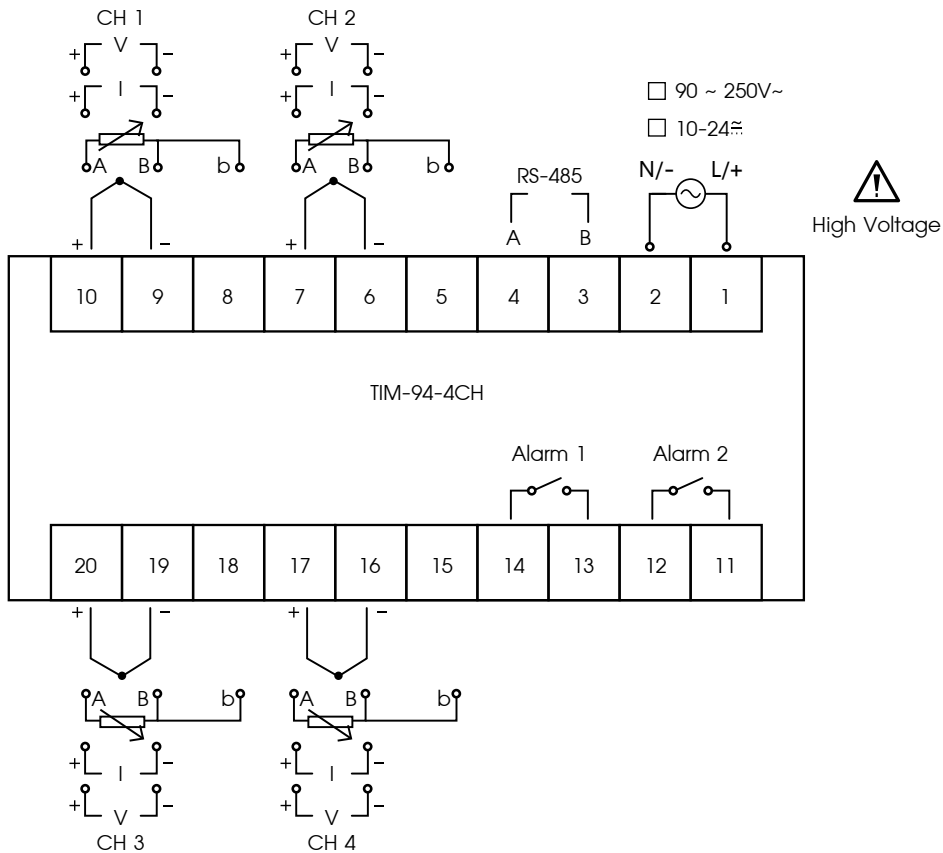
a	b	c	d
92 ±0.8	45 ±0.6	60	120



INSTALLATION



WIRING DIAGRAM



ORDERING CODE

