

Highlights

- 8 / 16 Universal Analog Channels (Differential Input)
- Each Channel Independently Configurable (Jumper-less) for :
Thermocouples, RTD Pt100, mV, V, mA
- RS485 Serial Interface (MODBUS/RTU Protocol)
with Settable Slave ID, Baud Rate & Parity
- Free PC Tool for Easy Configuration & Parameter Settings
- Free PC Software for Online Data Monitoring & Recording

Features

- Fast Channel Update Rate : 250 mS per Channel
- 16 Bit Sigma-Delta ADC (± 32 , 768 Counts)
- Software Linearization for Thermocouple & RTD Inputs
- Automatic CJC for Thermocouple & LRC for RTD Input
- High Accuracy, High Resolution, High Stability
- 4 Programmable Alarms per Channel
- Universal Supply Voltage : 85 to 264 VAC, 50/60 Hz



Specifications

Analog Input Channels	
Number of Channels	8 (CIM Plus - 8) or 16 (CIM Plus - 16), Universal
Input Type (Jumper-Less Selection for Each Channel)	Thermocouples : J, K, T, R, S, B, N RTD : Pt100, 3-Wire DC mV : ± 80 mV DC Volts : $\pm 1.25V, \pm 5 V, \pm 1$ to $\pm 5 V, \pm 10 V$ DC mA : 0 to 20 mA, 4 to 20 mA
Accuracy	$\pm 0.25\%$ of reading
Corrections	<ul style="list-style-type: none"> • Cold-Junction Compensation for Thermocouples (Accuracy Better than $\pm 0.5^{\circ}C$) • Lead Resistance Compensation for RTD (Upto 22 Ohms in each lead)
Range	Thermocouple & RTD Pt100 : Refer Table-1 DC Volts / Current : ± 0 to 30000 Counts
Zero Offset	User Adjustable over Full Range for Each Channel
ADC	16 Bit (± 32 , 768 Counts), Sigma-Delta ($\Sigma\Delta$)
Sampling Time	250 mS Per Channel
Input Resistance	Differential Mode > 20 M Ω Common Mode > 10 M Ω
Common Mode Rejection	> 100dB at 50/60 Hz
Input Protection	ESD : 8KV EFT : 2KV Surge : 1KV
Input Conditioning	First Order Analog R-C Low-Pass Filter

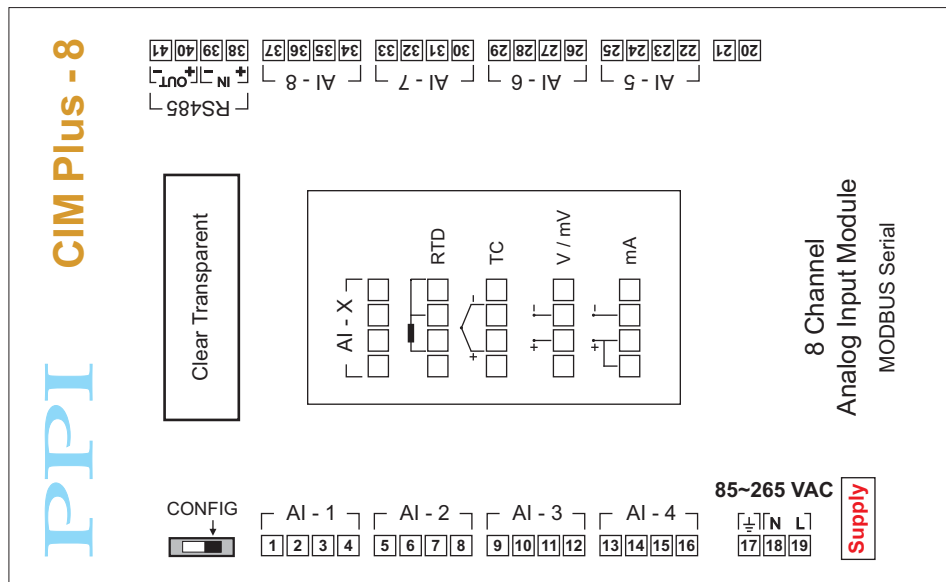
Alarms	
Numbers	4, Independent, for Each Channel
Programmable Parameters	Type : Process Low, Process High Setpoint : Adjustable over Full Range Hysteresis : 1 to 3000 Unit Counts Inhibit : No, Yes
Serial Communication	
Port	RS485, 2-wire, Half Duplex, Start-Stop Synchronized
Protocol	Modbus RTU
Baud Rate	Settable : 2400, 4800, 9600, 19200, 38400, 57600, 115200
Parity	Settable : None, Even, Odd
Max. Units per Loop	31
Max. Distance	1200 Meters
Power Supply	
Type	Switch Mode (SMPS)
Supply Voltage	85 to 264 VAC, 50/60 Hz, Single Phase
Consumption	3VA Max
Physical	
Mounting	Wall Mounting
Overall Dimensions	CIM Plus - 8 : 115 (W) X 131 (L) X 52 (D),mm CIM Plus - 16 : 115 (W) X 208 (L) X 52 (D), mm
Terminals	Screw Type, Male-Female Detachable
Weight	400 gm, Appx.
Environmental	
Operating Ambient	0 to 55°C & 5 to 90%RH Non-condensing
Storage Temperature	-10 to +70 °C
EMC Standards	EN50081-2 & EN 50082-2 Generic Stds for Industrial Environment
Safety Standards	Meets EN61010, Installation Catagory II
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.

Table 1 : Temperature Ranges for Thermocouples & RTD

Input Type	Range (Min. to Max.)
Type J Thermocouple (Fe-K)	0 to +960.0°C / +32.0 to +1760.0°F
Type K Thermocouple (Cr-Al)	-200.0 to +1376.0°C / -328.0 to +2508.0°F
Type T Thermocouple (Cu-Con)	-200.0 to +387.0°C / -328.0 to +728.0°F
Type R Thermocouple (Pt/Pt-Rh13%)	0 to +1771.0°C / +32.0 to +3219.0°F
Type S Thermocouple (Pt/Pt-Rh10%)	0 to +1768.0°C / +32.0 to +3214.0°F
Type B Thermocouple	0 to +1826.0°C / +32.0 to +3218.0°F
Type N Thermocouple	0 to +1314.0°C / +32.0 to +2397.0°F
3-wire, RTD Pt100	-199.0 to +600.0°C / -328.0 to +1112.0°F

Back Panel Terminations

CIM Plus - 8



CIM Plus - 16

