

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 |

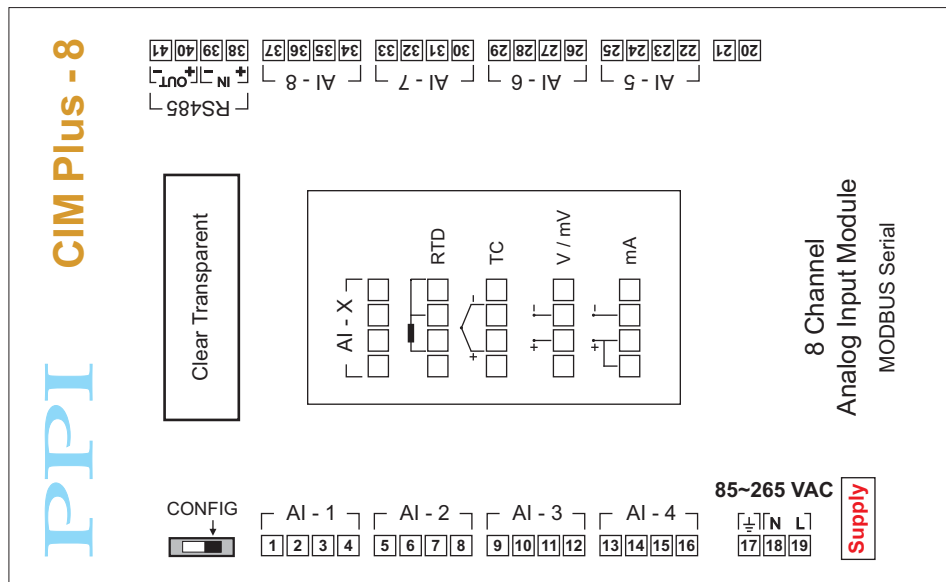
| Alarms | |
|-----------------------------|---|
| Numbers | 4, Independent, for Each Channel |
| Programmable Parameters | Type : Process Low, Process High Setpoint : Adjustable over Full Range Hysteresis : 1 to 3000 Unit Counts Inhibit : No, Yes |
| Serial Communication | |
| Port | RS485, 2-wire, 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

