ScaneX Plus

8 / 16 Channel Universal Process Scanner with FREE Data Logging PC Software

PPI
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Highlights

- 8 & 16 Channel Versions
- Monitoring of Min/Max Process Values for Each Channel
- Programmable Display Units (39) & Resolution for Each Channel
- 4 Programable Alarms for Each Channel
- 4 Common Alarm Relay Outputs (1 per Soft Alarm) **OR**
  Up to 16 Independent Alarm Relay Outputs (1 per Channel)
- Individual Alarm Status LED & Acknowledge Key on Front Panel
- PC Software for Online Data Monitoring & Recording

Features

- Universal Process Input (Thermocouples, RTD Pt100, mA, mV, V) for Each Channel (No Jumper Settings)
- Fast Channel Update Rate : 0.25 Seconds per Channel
- Auto/Manual Display Scan Mode with Programmable Scan Rate
- Zero Offset Adjustment for Each Channel
- RS485 MODBUS/RTU Serial Communication Port
- Universal Supply Voltage : 85~264 VAC, 50/60 Hz
- DIN Standard Dimensions (mm) : 96(H) X 192(W) X 100(D)
- Flame-proof Enclosure (Gas Group IIA & IIB) Available

PC Software

- Supports Multiple Scanners
- Auto startup of Software on PC Power up
- Programmable Recording Interval, Channel Naming & Grouping
- Recording of Process Values and Alarm Status
- Online Data Display in Tabular and Graphical Forms with Alarm Indications
- Multi-Level Password Protected Access
- Manual and Auto backup Facility with Archiving
- Data Log Reports for User Selected Parameters & Channels with Configurable Title, Header & Footer
- Selectable Date-Time Format in Reports
- Data Log Report, Alarm Log Report, History Graph & Audit Trail Report in PDF & EXCEL Formats

Specifications

Display	
Digital Readout	Upper Readout : 5+2 digits, 0.39” Bright Red LED, 7 Segment Lower Readout : 4 digits, 0.39” Luminous Green LED, 7 Segment
Status Indicators	16 Red LED for Alarm Status Indications 1 Red LED for Auto / Manual Selection Indication
Keys	
Type	6 Tactile Switches
Functions	PAGE, DOWN, UP, ENTER, Alarm ACK/VIEW, A/M Select
Channels	
Numbers	8 or 16
Display Scan Mode	Auto : Programmable Scan Time (1 to 99 Seconds) Manual : UP/DOWN Keys for Channel Selection
Sensor Input	
Type (User Programmable without Jumper Setting)	Thermocouple : J, K, T, R, S, B, N RTD : Pt100 (3-wire & 2-wire) DC Current : 0-20 mA, 4-20 mA DC mV : 0-80 mV DC Voltage : 0-1.25 V, 0-5 V, 0-10 V, 1-5 V
Corrections	• In-built Cold-Junction Compensation for Thermocouples • In-built Lead Resistance Compensation for RTD (Upto 22 Ohms in each lead)
Accuracy	For Thermocouples & RTD : ± 0.25% of reading ± 1°C For DC mA/mV/V : ± 0.25% of reading ± 1 LSD
Range	Thermocouples & RTD : Refer Table-1 DC mA/mV/V Inputs : Adjustable from -19999 to 30000 Counts
Display Resolution (User Programmable for Each Channel)	Thermocouples & RTD : 0.1 / 1 (°C / °F) DC mA/mV/V : 0.001 / 0.01 / 0.1 / 1 Counts
Zero Offset	User Adjustable over Full Range for Each Channel
ADC	16 Bit (±32,768 Counts), Sigma-Delta (ΣΔ)
Channel Update Time	250mS (2 Seconds for 8 Channels, 4 Seconds for 16 Channels)
Common Mode Rejection	> 100dB at 50/60 Hz
Signal Conditioning	L-C Analog Filter
Alarms	
Numbers	4 Independent for Each Channel
Programmable Parameters	Type : Process Low, Process High Logic : Normal, Reverse Hysteresis : 1 to 3000 Unit Counts Inhibit : No, Yes
Outputs	4 Common Alarm Relay Outputs (1 per Soft Alarm) **OR** Up to 16 Independent Alarm Relay Outputs (1 per Channel)

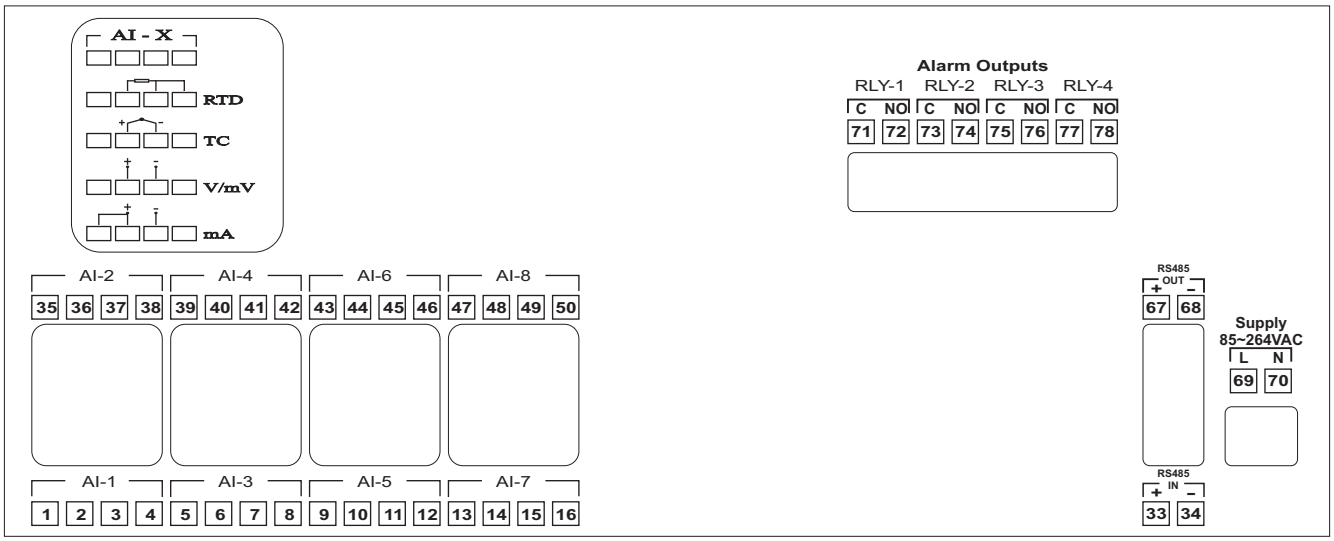
Outputs	
Relay	Contact Type : Potential-free Change-over Contacts Contact Rating : 5A Resistive @ 120/240 VAC Contact Life : > 5,00,000 Operations at Rated Voltage / Current
Serial Communication	
Port	RS485, 2-wire, Half Duplex, Start-Stop Synchronized
Protocol	Modbus RTU
Baud Rate	Settable : 4800, 9600, 19200, 38400, 57600
Parity	Settable : None, Even, Odd
Max. Units per Loop	31
Max. Distance	1200 Metres
Power Supply	
Type	Switch Mode (SMPS)
Line Voltage	85 to 264 VAC, 50/60Hz
Consumption	5VA Max
Environmental	
Operating Ambient	0 to 55°C & 5 to 90%RH Non-condensing
Storage Temperature	-10 to 70°C
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.
Physical	
Mounting	Plug-in with Panel Mounting Clamps
Overall Dimensions	96(H) X 192(W) X 100(D), mm
Panel Cutout	92(H) X 184(W), mm
Terminals	Screw Type
Weight	1000 gm (1 Kg), Appx.
PC Interface with 21 CFR Compliant Software	
Supported Operating Systems (OS)	Windows Vista Windows 7 Windows 8 (32 bit / 64 bit) Pentium Dual Core (32 bit / 64 bit)
Minimum PC Configuration Requirements	• 2.8 GHz Clock Speed • 2 GB RAM • 40 GB Hard Disk

Table 1 : Temperature Ranges for Thermocouples & RTD	
Input Type	**Range (Min. to Max.)**
Type J Thermocouple (Fe-K)	0 to +960°C / +32 to +1760°F
Type K Thermocouple (Cr-Al)	-200 to +1376°C / -328 to +2508°F
Type T Thermocouple (Cu-Con)	-200 to +385°C / -328 to +725°F
Type R Thermocouple (Pt/Pt-Rh13%)	0 to +1770°C / +32 to +3218°F
Type S Thermocouple (Pt/Pt-Rh10%)	0 to +1765°C / +32 to +3209°F
Type B Thermocouple	0 to +1825°C / +32 to +3092°F
Type N Thermocouple	0 to +1300°C / +32 to +2372°F
3-wire, RTD Pt100	-199 to +600°C / -328 to +1112°F

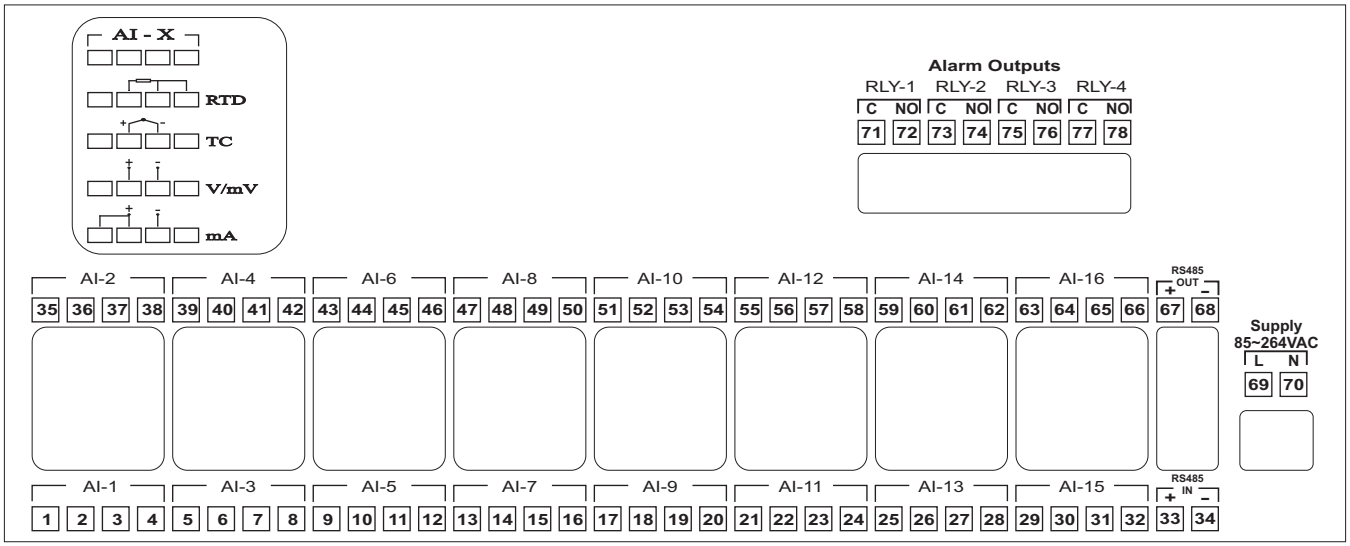
Back Panel Terminations

Old Version

8 Channel Version

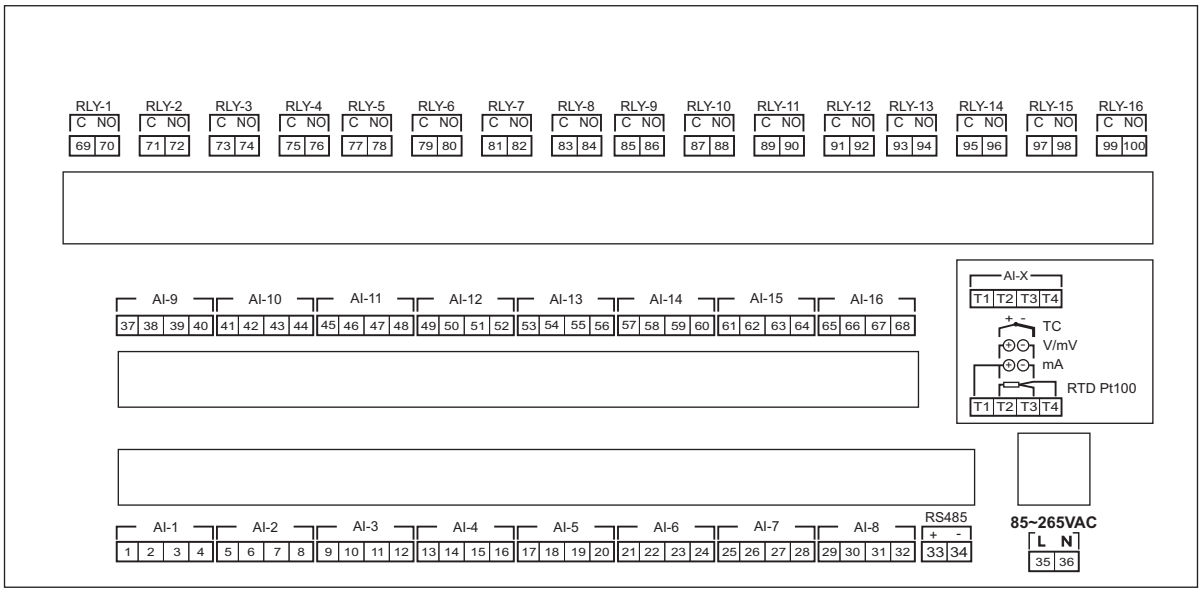


16 Channel Version



New Version

4 / 8 / 12 /16 Channels



Ordering Code

Input*		–	Channels		–	Alarm Outputs		–	Power Supply	
TC	Thermocouple		4	4 Channels		C	4 Common Relays		0	85~264 VAC
PT	RTD Pt100		8	8 Channels		D	4 / 8 /12 /16 Independent depending on Channels			
			12	12 Channels						
			16	16 Channels						

* Input type is universal and user programmable. The ordering code only implies the factory settings at the time of dispatch.

Example Code

TC - 16 - D - 0

Thermocouple Input, 16 Channels, 16 Independent Alarm Relays, 85~264 VAC supply voltage

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