

# Process Indicators

PI-44X / PI-77X / PI-88X / PI-99X



## Features

- Universal Sensor Input
- Programmable Analog Range (-1999 to 9999)
- Excitation Voltage : 5 VDC/10 VDC/12 VDC/24 VDC
- Two Independent Alarm Output
- Optional Retransmission & RS-485 Communication
- Program Lock function
- User Calibration Available For Analog Inputs
- Universal supply voltage (90 to 270 VAC)
- 24 VDC Available on Request

## Technical Specifications

### Display Specification

Digits	4 Digits Single Row 7 Segment LED Display				
LED Indication	AL1 - Alarm 1 Status AL2 - Alarm 2 Status				
Height	Model	PI-44X	PI-77X	PI-88X	PI-99X
PV (White)		0.36"	0.56"	0.56"	0.56"

### Input Specification

Sensor Input	Thermocouple - J,K,R,S,N,T,B RTD - Pt-100
Analog Input	0-1 VDC, 0-3.3 VDC, 0-5 VDC 0-10 VDC, 0-20 mA , 4-20 mA
Resolution	1 / 0.1 / 0.01 / 0.001
Accuracy	0.3% FS
Sampling Rate	250 m Sec

### Keys

4 Controlling keys for configuration and operation



### Auxiliary Supply Specification

Supply Voltage	90 - 270 VAC (24 VDC Available on Request)
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### Environmental Specification

Temperature	Operating - 0 to 50°C
Storage	-20° to 75°C
Humidity	95% RH (Non-condensing)

### Certification

None



## Functional Specification

Analog Input Logic	Direct / Reverse
Process Value Offset	-25 to 25
Input Filter	1 to 10
OP1 & OP2 Function	Alarm
Alarm Modes	Low / High / Band
Serial Communication	RS-485, Half Duplex
Protocol	Modbus RTU
Retransmission	0-20mA, 4-20mA (500ΩMax.) 0-10 Volt (1 KΩMax.)

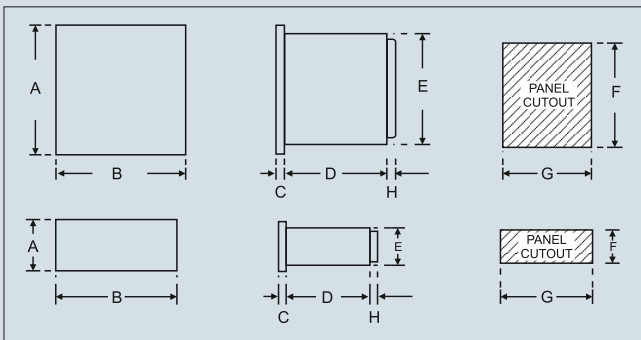
## General Description

Model	PI-44X	PI-77X	PI-88X	PI-99X
Weight (Gms)	160	260	220	280
Enclosure	Molded ABS			
Color	Black			
Accessories	1 Pair of Mounting clamp			
Terminal Cable Size	Barrier Type terminal cable Size ( 2.5 mm <sup>2</sup> )			

## Mechanical Dimensions

Model	Dim A	B	C	D	E	F	G	H
PI-44X	48	48	8	85	43	44	44	9
PI-77X	72	72	10	65	66	68	68	9
PI-88X	48	96	10	53	43	44	92	9
PI-99X	96	96	10	53	89	92	92	9

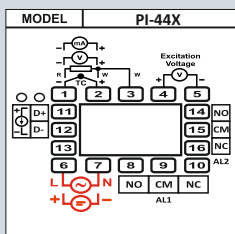
## Mechanical Dimensions



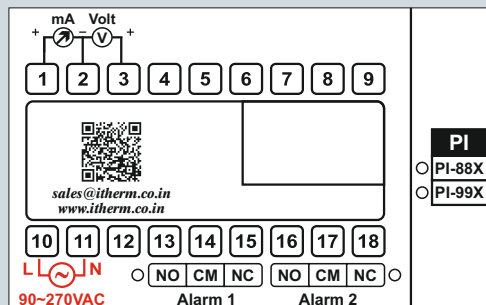
## Output Specification

Output 1	Relay / SSR Drive (factory Set)
Output 2	Relay / SSR Drive (Factory Set)
Relay	5A @ 250 VAC / 30 VDC
SSR Drive	12 VDC @ 30mA

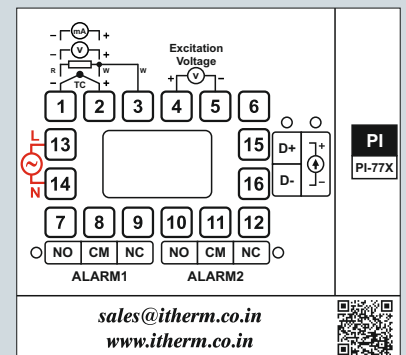
## Terminal Diagram



PI-44X



PI-88X / PI-99X



PI-77X

## Order Code : PI-XX2 Series

Size	No. Of Digits	O/P1 Type	O/P2 Type	Retransmission	Communication
4 (48X48X85)	Two	R (Relay)	R (Relay)	1 (4-20 mA)	B (RS-485)
7 (72X72X65)		S (SSR Drive)	S (SSR Drive)	2 (0-20 mA)	N (None)
8 (48X96X53)				3 (0-10 Volt)	
9 (96X96X53)					

## Order Code : PI-XX2 Series

Size	No. Of Digits	O/P1 Type	O/P2 Type	Retransmission	Communication
7	2	R	R	1	B
7 (72X72X65)	Two	R (Relay)	R (Relay)	4-20 mA	B (RS-485)

## Input Sensor Range

Sensor Input	Range	Resolution	Accuracy
Fe-k(J) T/C	-1999 to 9999	1	$\pm 1$
Cr-AL-(K) T/C	-1999 to 9999	1	$\pm 1$
(R)T/C	-1999 to 9999	1	$\pm 1$
(S)T/C	-1999 to 9999	1	$\pm 1$
TC-N	-1999 to 9999	1	$\pm 1$
TC-T	-1999 to 9999	1	$\pm 1$
TC-B	-1999 to 9999	1	$\pm 1$
Pt-100 (RTD)	-1999 to 9999	1	$\pm 1$
Pt-100 (RTD 0.1)	-1999 to 9999	1	$\pm 1$
0 ~ 20 mA	-1999 to 9999	1 / 0.1 / 0.01 / 0.01	} + 0.1 % of Full Scale
4 ~ 20 mA	-1999 to 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 1 VDC	-1999 to 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 3.3 VDC	-1999 to 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 5 VDC	-1999 to 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 10 VDC	-1999 to 9999	1 / 0.1 / 0.01 / 0.001	