



## Features

- RTD Pt100 (3 - Wire) Input
- Ultra Precision Resolution (0.01°C) & Control Accuracy
- Programmable Input Signal Conditioning (Digital Filter & Zero Offset)
- Self Tune PID or On-Off Control
- Heat (Reverse) or Cool (Direct) Control Mode
- Relay / SSR Control Output (No Jumper Settings)
- In-built Programmable Timer with Front / Remote Start
- Auxiliary Control : Blower / Alarm / Compressor with Time Delay
- Optional Serial Communication Port
- DIN Standard Dimensions : 48(H) X 48(W) X 110(D), mm

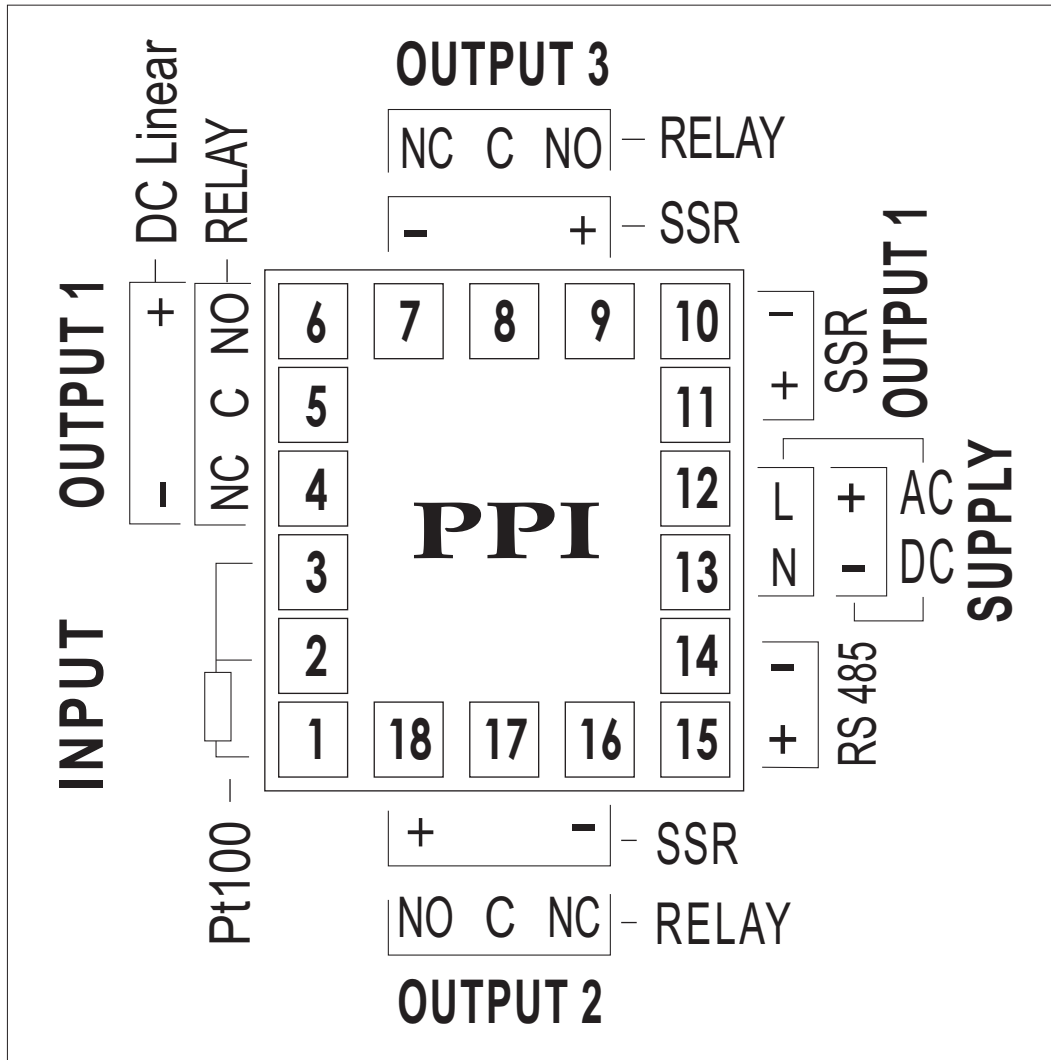
## Specifications

Display	
Digital Readout	Upper Readout : 4 digits, 0.39" Bright Red LED, 7 Segment Lower Readout : 4 digits, 0.3" Luminous Green LED, 7 Segment
Status Indicators	5 Red LEDs (3mm Round)
Keys	
Type	4 Tactile Switches
Functions	PAGE, DOWN, UP, ENTER
Sensor / Signal Input	
Type	RTD Pt100, 3 wire
Corrections	In-built Lead Resistance Compensation for RTD (Upto 22 Ohms in each lead)
Accuracy	± 0.25% of reading ± 1°C
Display Range	-19.99 to 99.99°C
Display Resolution	0.01°C
Zero Offset	User Adjustable over Full Range
ADC	16 Bit (±32,768 Counts), Sigma-Delta (ΣΔ)
Sampling Time	200mS (5 Samples per Second)
Input Resistance	> 8 MOhm
Common Mode Rejection	> 100dB at 50/60 Hz
Signal Conditioning	L-C Analog Filter with Programmable Digital Low-Pass Filter

<b>Alarms</b>	
Numbers	2, Independent
Programmable Parameters	Type : Process Low, Process High, Deviation, Window Logic : Normal, Reverse Inhibit : No, Yes
Outputs (Optional)	Relay Change-over Contacts or SSR Drive (Jumper Selectable) Output-2 (OP-2) for Alarm-1, Output-3 (OP-3) for Alarm-2
<b>Auxiliary Control</b>	
Control Type	Second Setpoint or Blower / Compressor Setpoint
Control Parameters	<ul style="list-style-type: none"> <li>• Second Setpoint : Hysteresis, Control Logic</li> <li>• Blower / Compressor : Hysteresis, Time Delay</li> </ul>
<b>Main Control</b>	
Type	ON-OFF Or Self Tune PID
Mode	Heat only, Cool only
Control Parameters	<ul style="list-style-type: none"> <li>• ON-OFF : Hysteresis</li> <li>• Self Tune PID : Proportional Band, Integral Time, Derivative Time, Cycle Time, Power Low, Power High, Overshoot Inhibit</li> </ul>
<b>Programmable Timer</b>	
Operation Mode	Free Running or Soak at Setpoint with Hold Band
Range	5 Seconds to 999 Hours
Power-fail Recovery	Resume, Reset, Abort
<b>Outputs</b> (Refer Table 1 : Output Option Selection & Function Assignments)	
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
SSR Drive	> 4.2 VDC into 1KOhm Minimum
<b>Power Supply</b>	
Type	Switch Mode (SMPS)
Line Voltage	Standard : 85~264 VAC, 50/60Hz Optional : 18~36 VDC
Consumption	5VA Max
<b>Physical</b>	
Mounting	Plug-in with Panel Mounting Clamps
Overall Dimensions	48(H) X 48(W) X 110(D), mm
Panel Cutout	45(H) X 45(W), mm
Terminals	Screw Type
Weight	225 gm, Appx.

Environmental	
Operating Ambient	0~55°C & 5~90%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.

### Back Panel Terminations



## Table 1 : Output Option Selection & Function Assignments

	Available Options (Specify while Ordering)	Function Assignments (User Programmable)
Output-1 (OP-1)	<input type="checkbox"/> Relay, SSR	✓ Main Control Output
Output-2 (OP-2)	<input type="checkbox"/> Relay, SSR (Jumper Selectable)	✓ Alarm-1 Output ✓ Auxiliary Control Output ✓ Blower Control Output
Output-3 (OP-3)	<input type="checkbox"/> Relay, SSR (Jumper Selectable)	✓ Alarm-2 Output ✓ Auxiliary Control Output

### Ordering Code

Input		Output 1		Output 2		Output 3		Power Supply		Options	
PT	RTD Pt100	1	Relay/SSR	0	None	0	None	0	85~264 VAC	N	None
				1	Relay*	1	Relay*			S	Serial Port
				2	SSR*	2	SSR*				

**Example Code**    **PT-1-1-1-0-S**

RTD Pt100 Input, Output-1 Relay/SSR, Output-2 Relay, Output-3 Relay, 85~264 VAC Supply, Serial Port

\* Relay and SSR selection is jumper settable by user. The ordering code only implies the factory settings at the time of dispatch.