

**PV Display Run Mode**

**Ambient** Applicable only if input type is TC

**%Power** Applicable only in Auto Mode

**Control Set Point 1** Range Depending on PV sensor type selected.

**\*Alarm Set Point 1** Range Depending on PV sensor type selected.

**Alarm Set Point 2** Range Depending on PV sensor type selected.

\*Parameter is only shows if output type is linear

**Auto Tune Mode**

**1 Auto Tune** Start / Stop Auto Tuning Process

**2 Proportional Band** Adjust Proportional Band

**1 Integral Time** Adjust Integral Time

**3 Derivative Time** Adjust Derivative Time

**Cycle-Time** Adjust Cycle Time  
For, SSR o/p: (1 - 60 sec)  
Relay o/p: (10 - 300 sec)

**2 Output Direction** Set Output Direction

**4 Manual Reset** Adjust Manual Reset Value  
It is used to shift P Band for critical Controlling situations.  
(Applicable only if Control O/P is "P")  
-(PB/2) to +(PB/2)

PV	%POWER	PV	%POWER
<= 75	100 %	<= 100	100 %
100	50 %	125	50 %
>= 125	0 %	>= 150	0 %

**3 Sampling Rate** Adjust Sampling Rate. Its acts like Derivative Factor. It is used to decrease effect of D term in PID output for some critical operating condition 0.01 to 1.00

**3 Sampling Period** Set Sampling Period.

**Ramp-Rate type**

**6 Ramp rate value** 0.1 to 999.9 Degree per minutes or hour

**5 Soak rate** 1 to 9999 minutes

**5 Soak type**

**CONF CONF**

**Input Type** Set PV Input Type

**ZERO** Automatically change to the Input Lower Range with changing of Input Type , Can be set to any value within the Input Range & less the SPAN Value.

**Span** Automatically change to the Input Higher Range with changing of Input Type , Can be set to any value within the Input Range & greater the ZERO Value.

**Offset** Offset Value

Input type	Range
RTD/ Thermocouple	-100.0°C to +100.0°C
Linear	-1000 to +1000

**Filter** Enable or Disable Filter for PV Input

**1 Type of Set Point** Set Type of Set Point

**OPEN Sensor Status** Set Control O/P & Retransmission state when Input OPEN condition.

**1 Relay delay** Relay Delay is amount of time (in sec), that Relay 1 will wait before getting ON after the ON condition occurs.

**1 Hysteresis - 1** (For Relay-1) Hysteresis Value for Relay-1 during ON-OFF type Control.

1 to 100	TC & RTD Input
0.1 to 100.0	RTD.1 Input
1 to 100	Linear Input with DP=0
0.1 to 100.0	Linear Input with DP=1
0.01 to 10.00	Linear Input with DP=2
0.001 to 1.000	Linear Input with DP=3

**2 Decimal Point** Set position of Decimal Point on Display.

**Display Setpoint** Set which Set Point to show in SV display in RUN mode while device is in Auto Mode

**Brightness** Adjust Brightness of the 7-segment Display.

**SR NO** Unit ID for Modbus-RS485 Communication

**BAUD RATE** Set Modbus RS485 Communication Baud Rate

**Retransmission 1** Retransmission-1 Output Type, This output is according to PV input. Zero & Span acts as Min & Max value of retransmission o/p scale respectively.

**3 Retransmission-1 Direction**

Set Direction for the Retransmission Output-1  
*rEv / dIr*  
 0 : REV (REVERSE)  
 1 : DIR (DIRECT)  
 EX. If i/p is RTD.1,ZERO=0,SPAN=600, RTR.1=4-20mA& RT.D.1=DIR  
 when PV = 0, RTR o/p = 4mA  
 PV = 300, RTR o/p = 12mA  
 PV = 600, RTR o/p = 20mA  
 RT.D.1=REV  
 when PV = 0, RTR o/p = 20mA  
 PV = 300, RTR o/p = 12mA  
 PV = 600, RTR o/p = 4mA

*r.d-1 dIr*

SET1

**Retransmission 2**

Retransmission-2 Output Type, This output is according to PV input. Zero & Span acts as Min & Max value of retransmission o/p scale respectively.  
*0-5v / 1-5v / 0-10 / 4-20 / 0-20*  
 0 : 0-5V  
 1 : 1-5V  
 2 : 0-10V  
 3 : 4-20mA  
 4 : 0-20mA  
 Voltage or Current is Jumper Selectable from the Hardware.

*rt2 4-20*

SET1

**Retransmission-2 Direction**

Set Direction for the Retransmission Output-1  
*rEv / dIr*  
 0 : REV (REVERSE)  
 1 : DIR (DIRECT)

*r.d-1 dIr*

SET1

**Output Type**

Output Type  
*rELY / SSR / LIN*  
 0 : RELY (Relay)  
 1 : SSR (Voltage Pulse Output)  
 2 : LIN (Linear)(Linear and SSR shows if control output is not on-off)

*0t rELY*

SET1

**Control Output Type**

Select Controlling Type for Output  
*P / P1 / PID / onof*  
 0 : P (Proportional Control)  
 1 : PI  
 2 : PID  
 3 : ON-OFF(not shows if output type is Linear)

*CoP P*

SET1

**Control Output Low Limit in %**

Control Output Low Limit in %  
 0.0 to 100.0 %  
 (It will be always less than CO.HI)

*CoLo 00*

SET1

**Control Output High Limit in %**

Control Output High Limit in %  
 0.0 to 100.0 %  
 (It will be always greater than CO.LO)

*CoHi 1000*

SET1

**4 Alarm Type -1**

Alarm Operations  
 0 to 15

*RtP 6*

SET1

**Alarm Type -2**

Alarm Operations  
 0 to 15

*RtP 6*

SET1

**4 Alarm 1 Hysteresis**

Set Hysteresis For Alarm 1.

1 to 100	TC & RTD Input
0.1 to 100.0	RTD.1 Input
1 to 100	Linear Input with DP=0
0.1 to 100.0	Linear Input with DP=1
0.01 to 10.00	Linear Input with DP=2
0.001 to 1.000	Linear Input with DP=3

*RtH 1*

SET1

**Alarm 2 Hysteresis**

Set Hysteresis For Alarm 2.

1 to 100	TC & RTD Input
0.1 to 100.0	RTD.1 Input
1 to 100	Linear Input with DP=0
0.1 to 100.0	Linear Input with DP=1
0.01 to 10.00	Linear Input with DP=2
0.001 to 1.000	Linear Input with DP=3

*RtH 1*

SET1

**4 Alarm 1 Logic**

Set Logic for Alarm-1  
*nor / FLSF*  
 0 : NORM (Normal)  
 1 : FLSF (Fail-Safe)

*RtL nor*

SET1

**Alarm 2 Logic**

Set Logic for Alarm-2  
*nor / FLSF*  
 0 : NORM (Normal)  
 1 : FLSF (Fail-Safe)

*RtL nor*

SET1

**4 Alarm 1 Delay**

Alarm Delay is amount of time (in sec), that Relay-1 will wait before getting ON after the alarm condition occurs.  
 1 to 99 sec

*RtD 1*

SET1

**Alarm 2 Delay**

Alarm Delay is amount of time (in sec), that Relay-2 will wait before getting ON after the alarm condition occurs.  
 1 to 99 sec

*RtD 1*

SET1

**5 Auto Cold Junction Compensation**

Select Auto Cold Junction Compensation required for TC input Type  
*no / YES*  
 0:NO  
 1:YES

*RtJC YES*

SET1

**6 Fix Cold Junction Compensation**

Set Fix cold junction Compensation value.  
 0 to 60.0 °C

*FtJC 0*

SET1

**Function Key**

Select A/M or Soak time  
*A-M / SOK.T*  
 0:A-M  
 1:SOK.T

*FtKY SOK.T*

SET1

**Password**

Set Device Password 0 to 99

*PRSS 1*

SET1

**Version**

Shows the Version of the Current Firmware

*vErS -*

<sup>1</sup> Parameter is only shows if control output type is ON-OFF.  
<sup>2</sup> Parameter is only shows if input type is Linear.  
<sup>3</sup> Parameter is only shows if output type is not Linear.  
<sup>4</sup> Parameter is only shows if output type is Linear.  
<sup>5</sup> Parameter is only shows if input type is TC.  
<sup>6</sup> Parameter is only shows if input type is TC and A.CJC is NO.

**CAL**  
*CAL*

**\*Ambient**

Ambient Adjustment

*RtB*

SET1

**Calibration Zero**

Calibration Zero for PV Input

*CALZ*

SET1

**Calibration Span**

Calibration Span for PV Input

*CAL5*

SET1

**Retransmission 1 Zero**

Calibration Zero for Retransmission Output-1

*rt21*

SET1

**Retransmission 1 Span**

Calibration Span for Retransmission Output-1

*rt51*

SET1

**Retransmission 2 Zero**

Calibration Zero for Retransmission Output-2

*rt22*

SET1

**Retransmission 2 Span**

Calibration Span for Retransmission Output-2

*rt52*

SET1

\*parameter is only shows if input type is TC