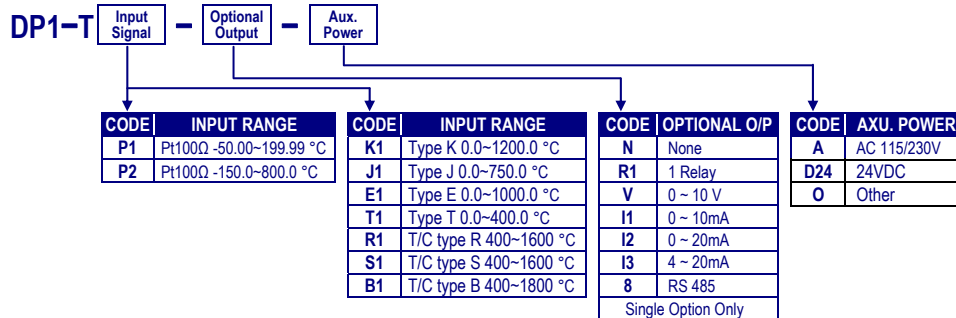


► FEATURES

- Measures and Displays RTD: Pt100Ω; Thermocouple: K, J, E, T, R, S, B
- Accuracy: RTD: ± 0.1%; Thermocouple: ± 0.2%
- Easily programmable via the front panel
- *1 Relay, 1 Analogue output or RS 485 communication*
- CE Approved



► ORDER CODING



► SPECIFICATION

	Measuring Range	Input Impedance	Excitation Supply
P1	Pt100Ω -50.00~199.99 °C	≥ 1M ohm	Sensing Current: 1.6mA
P2	Pt100Ω -150.0~800.0 °C	≥ 1M ohm	
K1	Type K 0.0~1200.0 °C	≥ 1M ohm	
J1	Type J 0.0~750.0 °C	≥ 1M ohm	
E1	Type E 0.0~1000.0 °C	≥ 1M ohm	
T1	Type T 0.0~400.0 °C	≥ 1M ohm	
R1	T/C type R 400~1600 °C	≥ 1M ohm	
S1	T/C type S 400~1600 °C	≥ 1M ohm	
B1	T/C type B 400~1800 °C	≥ 1M ohm	

Calibration: Calibration from front panel
Accuracy: Pt100Ω: ≤ ± 0.1% of FS ± 1C;
 Thermocouple: ≤ ± 0.2% of FS ± 1C;
Cold junction in T/C: 25 ± 20°C, error ≤ 0.5°C
Response time: ≤ 100 msec.(when the AvG = "1")

Operation

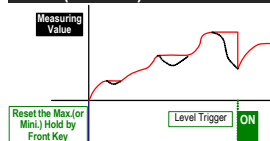
Programming: 4 keys for Enter(Function) / Shift(Escape) / Up / Down
 Up key: increases number / back to previous function
 Down key: decreases number / go to next function
 Shift/Escape key: moves the flashing digit position / Return to upper level
 Enter/Fun key: enter the parameters set or Selects programming mode

Programmable key: Down key can be programmed to be Present Value (PV), PV Hold, / Max-Min value reset/ or Relay reset if alarm is configured as latching 4 digit password
Security :
Lock: 3 function group lock level for None/User Level/ Engineer Level / All(Engineer Level & User Level)

Display functions

LED: Measured value: 0.56" red high-brightness LED
 Relay output indication: square red LED
 RS 485 communication: square orange LED
 Max. / Mini. Hold / PV Hold / Rel. PV : square red LED
Low Cut function: Low.cut :Settable range:-19999~+19999 counts
Average function: AvG :Settable range: 1~99 times
Digital Filter function: D.Filt : Settable range: 0(None)/1~99 times
Over range indication: ovFL, when input is over 120% of input range Hi
Under range indication: -ovFL, when input is under -120% of input range Lo
Display: Present Value / Maximum Hold / Minimum Hold / Write to display by RS485 command

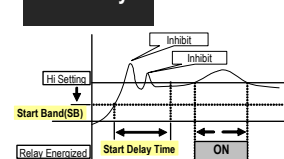
Max. (or Mini.) Hold & Reset



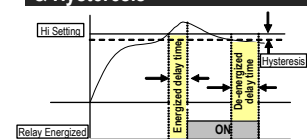
Control functions(optional)

Relay: 1 Relay SPDT, 5A/230Vac, 10A/115V
Relay Output: Energized levels are compared with set-points: Hi / Lo / Hi hold / Lo hold (latching) selectable
Functions: Start delay / Energized & De-energized delay / Hysteresis
 Start band: 0~9999 counts
 Start delay time: 0:00.0~9(Minutes):59.9(Second)
 Energized delay time: 9(Minutes):59.9(Second)
 De-energized delay time: 9(Minutes):59.9(Second)
 Hysteresis: 0~5000 counts

Start Delay



Energized / De-energized Delay & Hysteresis

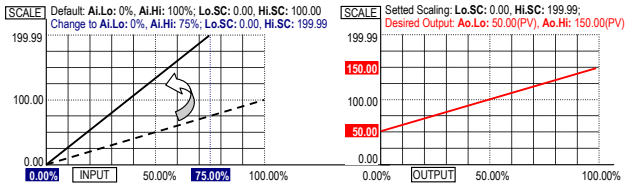


Analogue output(option)

Accuracy: ≤ ± 0.1% of F.S.;
Ripple: ≤ ± 0.1% of F.S.
Response time: ≤ 200 msec. (10~90% of input)
Isolation: AC 2.0 KV between input and output
Output range: Specify Voltage or Current
 Voltage: 0~5V / 0~10V / 1~5V selectable
 Current: 0~10mA / 0~20mA / 4~20mA selectable
Output Drive: Voltage: 0~10V; ≥ 1KΩ;
 Current: 0(4)~20mA: ≥ 600Ω
Functions: Ao.Hi(output high): PV Hi vs. output range Hi
 Ao.Lo(output range Low): PV Low vs. output range Lo

4½ Digit *T/C* & *RTD* with Alarm, A/O, RS485 Options

DP1-T



RS 485 communication(optional)

Protocol: Modbus RTU mode
Baud rate: Selectable 2400/4800/9600/19200/38400
Data bits: Selectable 7 or 8 bit
Parity: Selectable Even, odd or none (with 1 or 2 stop bit)
Device no: Settable 1 ~ 255
Write function: Write to display value from PC's RS485 command

Power

Power Supply: AC 115/230V ± 10%, 50/60Hz
Power consumption: 5.0VA
Back up memory: By EEPROM

Environmental

Operating temperature: 0~60 °C
Operating relative humi. 20~95 %RH, Non-condensing
Temperature coefficient: ≤100 PPM/°C
Storage temperature: -10~70 °C
Enclosure: Front panel: IEC 549 (IP54)

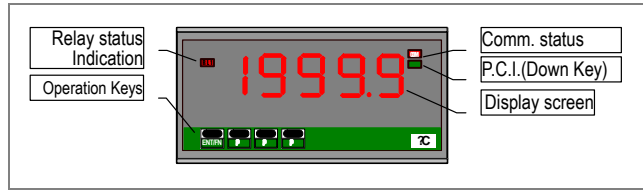
Electrical safety

Dielectric Strength: AC 2.0 KV for 1 min
 Between Power / Input / Output / Case
 ≥100M ohm at 500Vdc
Insulation resistance: Between Power / Input / Output
Isolation: Between Power / Input / Output
EMC: EN61326
Safety: EN61010

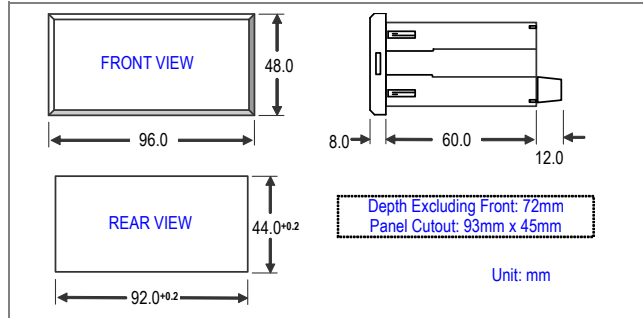
Mechanical

Dimensions: 96mm(W) x 48mm(H) x 72mm(D)
Panel cutout: 93mm(W) x 45mm(H)
Case Material: ABS fire-protection (UL 94V-0)
Mounting: Panel flush mounting
Terminal block: Plastic NYLON 66 (UL 94V-0)
 10A/300Vac, M2.6, 16~22AWG
Weight: About 350g

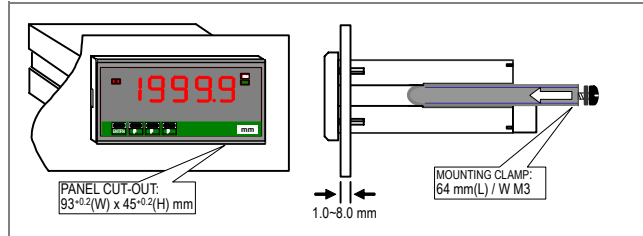
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

