

## TDS-W type intelligent digital display temperature controller



### Overview

TDS-W intelligent digital display temperature controller adopts PIC single-chip microcomputer processing technology to connect thermal resistance sensor signal measurement and control. This instrument is a new generation of instruments that are perfected and innovatively designed on the basis of modern advanced technology. The instrument has advanced precision, stability and reliability, especially suitable for temperature monitoring and control in electric power, metallurgy and chemical industries.

The main features are:

- 1, The micro-processing chip makes the linear technology intelligent, and can be directly adjusted on the disk surface without opening the machine.
- 2, with WATCH DOG monitoring technology anti-crash, digital rate filtering technology to enhance anti-interference ability.
- 3, using E2PROM power-down data protection, all data set and input status can be saved permanently.

The main parameters:

1. Input signal: copper resistance, platinum resistance, thermocouple, current, voltage.
2. Range: -20~+150 °C.
3. Accuracy level:  $\leq \pm 0.5\% \pm 1$  word.

4. Display mode: The 4 -digit LED on the screen displays the real-time measured value, and EP1 is displayed when the signal is short-circuited and EPO is displayed when the signal is open .

5. Alarm function: The breakage alarm screen displays EP1 , the over-range display EP0 , and the upper range display EP1 .

6, control settings: 2 level alarm, LED display, position ON / OFF with backlash.

7, the output method:

Switching quantity: relay contact output, relay ON/OFF with backlash

Analog quantity: 4~20mA , between -20~+150 °C full scale

Communication output: RS485 Modbus communication serial output

8 , working environment: temperature range 0~50 °C; relative humidity  $\leq$  85RH

9, working power: 110V ~ 220V AC / DC

10, structure: standard snap-in

11, power consumption:  $\leq$  5W .

12, weight: 450g