

Icstation DC 12V Programmable Temperature Controller

Icstation mini digital programmable thermostat temperature controller with waterproof NTC (10k 0.5%) temperature sensor probe and -50°C to 110°C (-58°F to 230°F) measuring range. On-board 3 digit LED display the set temperature and current temperature with settable function. On-board DC 12V one channel relay control the power on/off, one key to switch the $^{\circ}\text{C}$ and $^{\circ}\text{F}$ temperature display ideal for DIY temperature control system use. Widely used at smart home, industrial control, automatic irrigation, indoor ventilation and protection equipment.

Specifications:

Measuring Range: -50°C to 110°C (-58°F to 230°F)

Measuring Accuracy: $\pm 0.1^{\circ}\text{C}$

Controlling Accuracy: 0.1°C

Backlash Precision: 0.1°C

Refresh Frequency: 0.5s

High Temperature Protection: 0 to 110°C (32°F - 230°F)

Temperature Sensor Type: 10K0.5% NTC

Working Temperature: -10°C to 60°C (14°F to 140°F)

Compatible Load: 5A/15A 220VAC, 20A 14VDC

Power Supply: DC12V 200mA

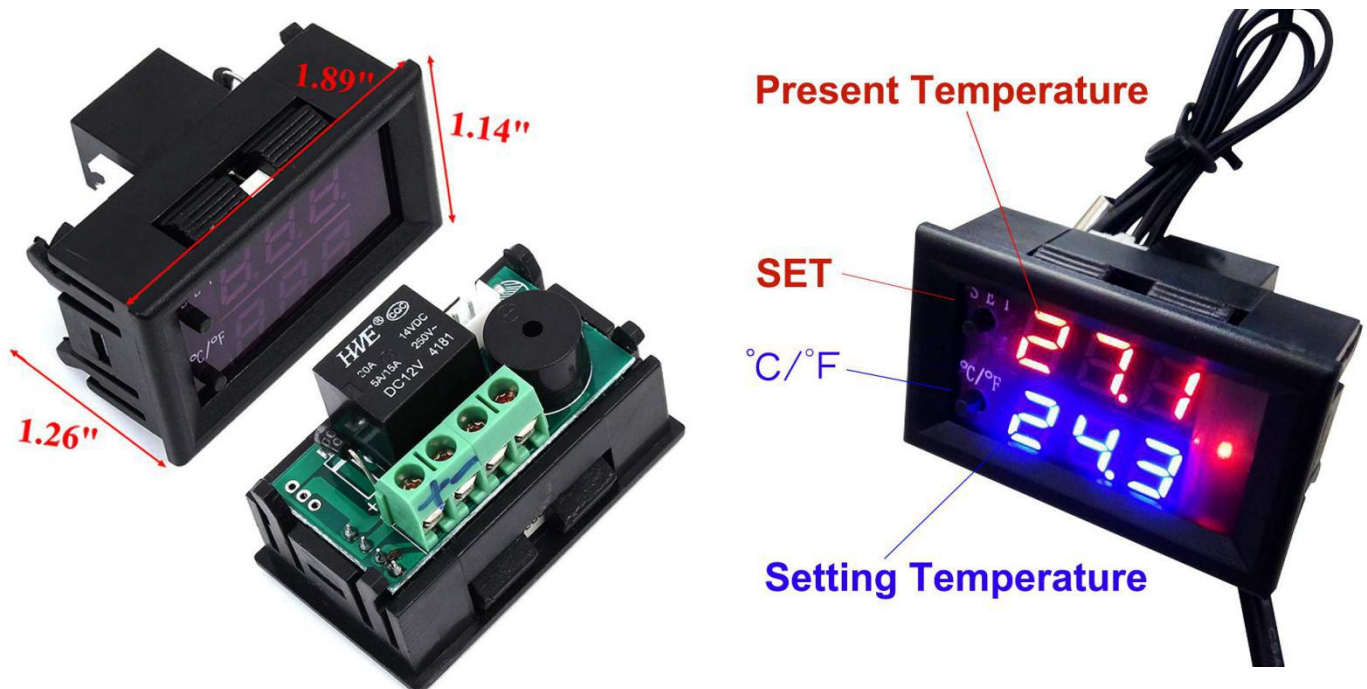
Power Consumption: $\leq 35\text{mA}$ (static), $\leq 65\text{mA}$ (relay close)

Module Size: 48 X 29 X 32mm/1.89 X 1.14 X 1.26inch (L*W*H)

Cable Length: 30cm/12inch, Probe: 2cm/0

Package Included:

1X Mini Digital Thermostat Temperature Controller Switch





Instruction:

1. Temperature setting: Press the SET then the LED will flash and then you can set the temperature with SET(+) and C/F(-) buttons. Wait for 3s, the module will automatically save the parameter and exit.
2. Indicator: It will turn on when the relay close.
3. Display: LL means the sensor is in open circuit status; HH means the the temperature is exceed the module measuring range; "- -" means the module is in the high temperature protection status.

| Code | Description | Setting Range | Default Setting |
|------|------------------------|---------------|-----------------|
| P0 | Heating/Cooling | H/C | C |
| P1 | Return Difference | 0.1-30 | 2.0 |
| P2 | Set maximum limit | +110 | 110 |
| P3 | Set minimum limit | -50 | -50 |
| P4 | Temperature Correction | -15~15 | 0 |
| P5 | Delay Start | 0-10 | 0 |
| P6 | High Temperature Alarm | ~50~110 | OFF |
| P7 | C/F | CS-FH | CS |
| P8 | Reset | ON-OFF | OFF |

If you need to control the refrigeration equipment:

1. Press SET for 5 seconds then enter setting manual
2. Press SET(+) or C/F(-) to switch from P0 to P8 setting.
3. Press SET and C/F at the same time to enter P0 setting. Select "C" in P0 setting by pressing the 2 buttons at the same time.
4. Press SET and then the blue number will flash. Use SET(+) and C/F(-) to set the stop cooling temperature. Wait for 3 seconds and it will automatically confirm the setting.
5. Press SET for 5 seconds to enter setting manual and then switch to P1. Press SET and C/F at the same time to enter P1 setting. The number starts flashing.
6. Set the return difference by SET(+) and C/F(-), and then wait for 3 seconds to confirm setting.

Note: the max return difference is 30.

For Example

You need a device start cooling at 190F and turn off at 160F.

1. Enter P0 setting and choose "C".
2. Press SET and set the stop cooling temperature as 160.
3. Enter P1 and set it as 30. (Because $190 - 160 = 30$)

Note: the max return difference is 30

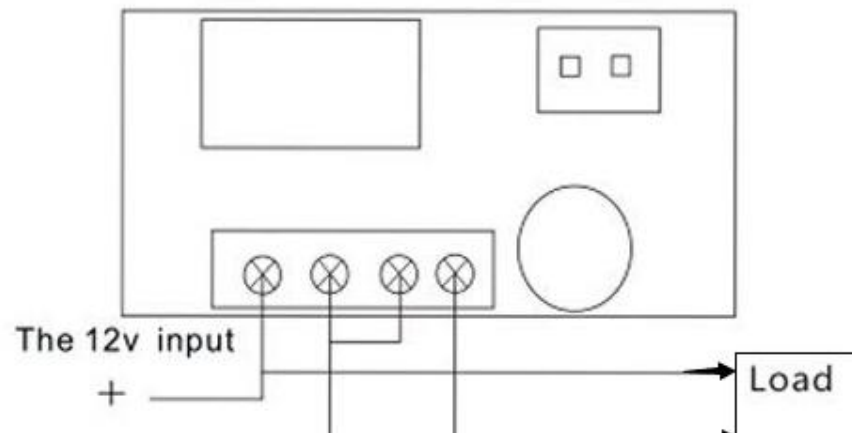


Easy install in 30 minutes



Diagram1: share the same power supply

Temperature control and load the 12v cases wiring way



Load and temperature control different power wiring diagram

