



## Features:

- Dual display, 4 digits, 7 segments LED display
- Thermocouple input (K, E, J, T, S, R, B, N, Wu3\_Re25, PT100, Analog)
- PID, PID Autotune, ON-OFF Control Mode
- **Built-in Timer+Temperature Controller**
- **Timer will be triggered automatically when PV reach to preset value**
- **Timer on delay off delay configurable**
- **Timer counting up with LED indication**
- **Timer relay output manual reset**
- °C/°F display selectable
- 0.3% F.S measuring accuracy
- Bar graphic display indication
- **Optional features**
  - RS485 Modbus RTU Communication
  - 24VDC/AC source available

## Technical Specifications

### Ordering Information

FT100-612	(48mm*48mm)(Width*Height)	1	2	3	*	4	5
FT400-612	(48mm*96mm)(Width*Height)						
FT700-612	(72mm*72mm)(Width*Height)						
FT900-612	(96mm*96mm)(Width*Height)						

#### 1: Input

Blank	No code in this position means standard model, TC/RTD input
A	4-20mA, 0-10Vdc.

#### 2: Output for temperature control(OP1)

R	Relay output
V	SSR Drive output
D	4-20mA output
E	0-10Vdc

#### 3: Alarm for temperature(AL1)

1	1 alarm(relay output)
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#### 4: Output for timer(OP2)

1	1 output(Relay)
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#### 5: Power Source

96	85~265Vac 50/60HZ
24	24Vdc/ac

#### 6: Communication

N	Without Communication
K	With Modbus RTU RS-485 communication

#### 7: PV Re-transmission

N	Without PV re-transmission function
P42	PV re-transmitted as 4-20mA
P010	PV re-transmitted as 0-10Vdc

#### 8: Auxiliary power supply

N	Without PV re-transmission function
A	24Vdc isolated
B	24Vdc grounded
C	12Vdc isolated
D	12Vdc grounded
E	9Vdc isolated
F	9Vdc grounded

Things you should know when ordering this model

1. This item is combo temperature + time 2 in 1 controller
2. Standard model with 1 alarm for temperature control, and 1 output for timer
3. This model supports TC/RTD input as a standard version, standard model is TC/RTD input and leave the position 1 blank without any code. if you need 0-10VDC, 4-20mA input, choose the code "B"

### General Specifications

#### Electrical Specifications

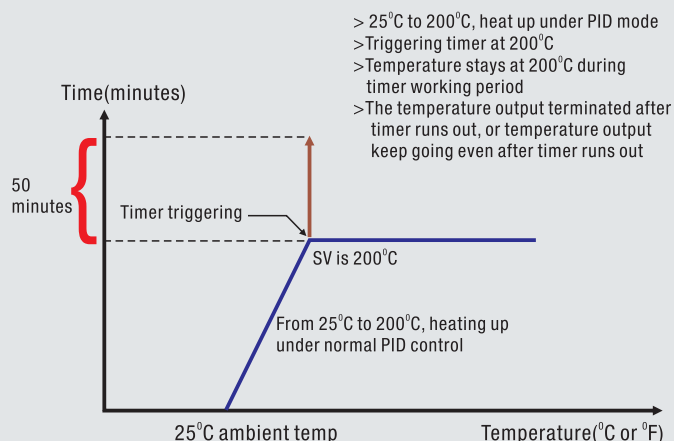
Display	Upper for temperature, lower for temp/time
Input	TC/RTD/Analog
Output for temperature	Relay/SSR Drive/4-20mA
Output for timer	Relay
Temp control mode	PID on/off mode
Timer triggering mode	Automatic triggering
Timer output reset mode	Manually reset from panel
Timer counting mode	Counting up
Timer setting range	1~9999 minutes
Timer unit	Minute
Timer relay output mode	Relay pull-in when timer kicks off or timer terminate
Power source	85~265Vac or 24VDC/AC
Measuring accuracy	0.3% F.S
Display unit	°C or °F display selectable
Communication	Modbus RS-485 RTU optional

#### Mechanical Enviromental Specifications

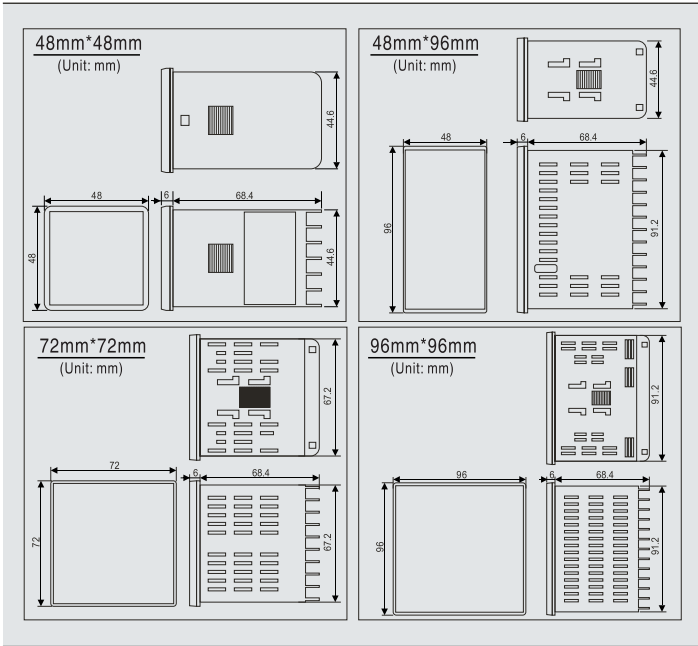
Size	48mm*48mm, 48mm*96mm, 72mm*72mm, 96mm*96mm
Weight	0.17kg/ 0.27kg/0.27kg/0.35kg
Operating temperature humidity	-10°C~+50°C 45%~85% RH

### Explanation on the working pattern of this controller

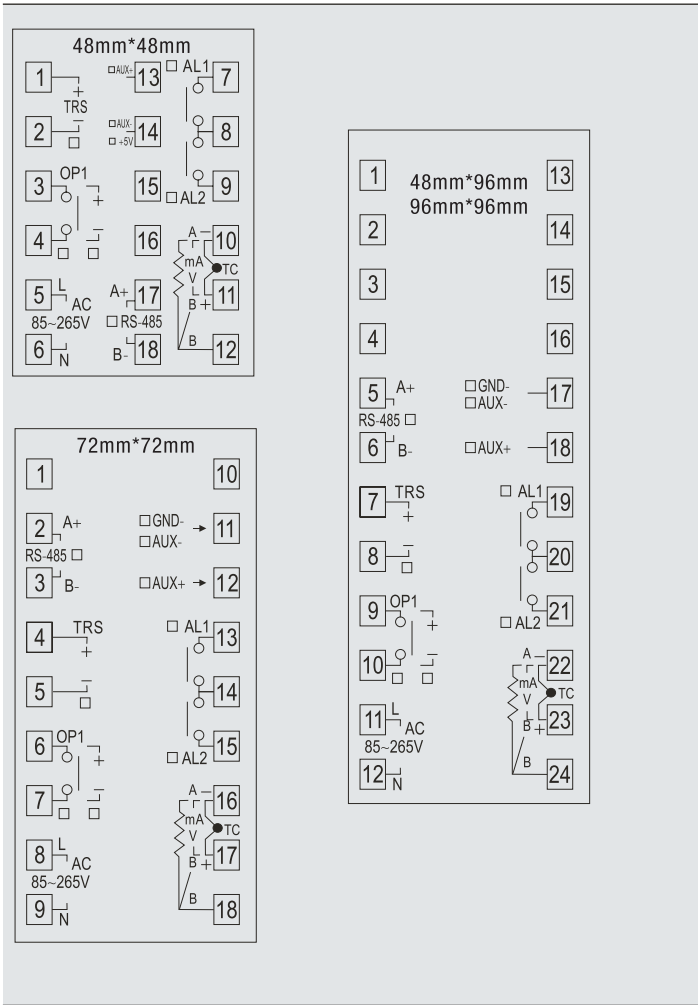
The timer will be triggered automatically when temperature reach to a preset value, for example, in an application where the temperature starts from the ambient temp at 25°C, you put the setting value at 200°C, the timer can be triggered automatically at any point from 0°C to 200°C. and the timer starts to tick at a preset period of time from 0-9999 minutes.



Dimension and cutout sizes



Wiring diagram



Typical procedure

