

Product Specification

Classification	Specified item	TEMP2300M	TEMP2500M	TEMP2700M	TEMP2000M	
Screen	Display	3.7" TFT-LCD	5.7" TFT-LCD	7.5" TFT-LCD		
	Resolution	640(W) × 480(H)				
	Language	Korean/English/Chinese, Korean/English/Japanese				
	User screen	Change of initial screen, Electronic album function				
	Mount type	Panel mount, VESA mount				
Control channel	Operation screen	Basic screen, available for making drawing which meets customer needs (Option)				
	Main channel	1 channel				
	Sub channel	Selection of 2/4/6 channel 2/4/6point(Universal Input)				
Analog input	Input quantity	1 (Universal input)				
	Sensor type	TC	K, J, E, T, R, B, S, L, N, U, W, Platine II, C			
		RTD	Pt100(JIS/IEC), JPt100(JIS)			
		DC Voltage	0.4~2V, 1~5V, 0~10V, -10~20mV, 0~100mV(4~20mV, 0~20mV, External Resistance 250Ω, 500Ω Attach)			
	Sampling period	250ms/channel				
Input level	±0.1% ± digit of full scale					
Analog output	Output specification (Max 2 point)	Voltage output (SSR) 2 point ON voltage : 15V DC (Load resistance:Min 600Ω/pulse width: Min 5ms)		1 point/Channel		
		Current output (SSR) 2 point 4~20ma DC (Load resistance: Max 600Ω.)				
	Output type	Control output/Transmitting output(PV,SP)/Sub output				
Digital input	Contact point specification	Basic 16 point (Contact point capacity: Max 12V DC, 10mA) A contact point or B contact point operation selection				
	Contact point function	Operation and stop/hold/step, selection of pattern for operation, DI sensing delay time setting, selection of DI error screen (Display of error message or user setting photo)				
	Contact point quantity	Basic 12 point Contact point relay 8 point +C contact point relay 4 point, Option (A contact point relay 20 point) addition function				
Digital output	Contact point specification	Normal Open(Max, 30VDC/1A, 250VAC/1A), Normal Close(Max, 30VDC/1A, 250VAC/1A)				
	Output type	Inner(8point)	ON/OFF(7point)	Arithmetic(3point)	Error(1point)	user(1point)
		Time(8point)	DI signal(16point)	Sensor short(1point)	heater short alarm(1point)	freezer(2point)
		Alarm(4point)	manual(16point)	Standby(1point)	Ascending/Stop/descending(each1point)	Heat short alarm (1 point/channel)
		Seg alarm(4point)	Operation(1point)	Stationary timer(1point)	Stationary.program terminatio(each1point)	
Heater current detection	Type	12A, 50A, 100A				
Program	CT sensor	800:1				
	Pattern/Seg Q'ty	40 pattern/600 segment				
	Segment set time	Max 999H 59M 59S				
PID control	Function	Ascending/Descending change ratio, standby operation, Operation start condition, Input pattern name, recovery mode after blackout, operation at pattern termination				
	Repetition	Entire repetition and range repetition				
Data backup	Storage media	SD/SDHC Card (FAT 32 format)				
	Function	Program pattern/Parameter set data backup and recovery, available for sectional saving max 6 point out of main channel and sub channel PV				
Communication	Communication spec	Basic : RS232C/485 selection, available for connection of maximum 31 units, communication speed: Max 115,200 bps, Option : Ethernet(TCP/IP) *Ethernet selection RS232C/485 unserviceability				
Electric source	Electric source/Lithium cell	24VDC 25VA Max/ Keeping the setting data (CR2032)				

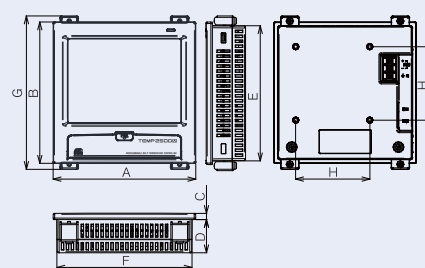
Multi-Channel programmable controller

TEMP2000M

3CH / 5CH / 7CH SERIES

External dimension and Panel cutting size

Display part

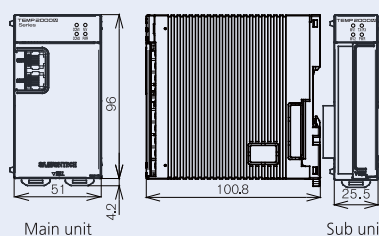


(Unit : mm)

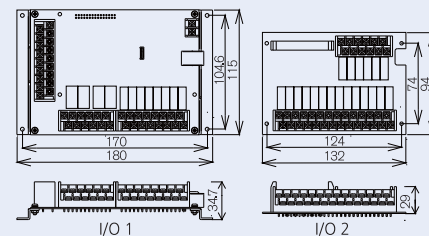
MODEL	2300M Series	2500M Series	2700M Series
A	112	144	203
B	105	144	180
C	6.2	6.2	6.8
D	33.5	33.5	38.2
E	98	137.5	173
F	105	137.5	196
G	117	156	192
H	75	75	75

※ Panel Cutting size : E, F (Tolerance : 0 / +1.0)

Control part



I/O Board



Model code


TEMP2*00M-0*/**/**/*


- Display LCD size
3 : 3.7inch | 5 : 5.7inch | 7 : 7.5inch
- I/O board
0 : I/O1 (Relay12Point) | 1 : I/O1.2 (Relay32Point)
- SD Card
N : None | SD : SD Card
- Communication option
RS : RS232C/485 (STD) | CE : Ethernet
- Heater short option
N : None | A : 50A | B : 100A | C : 12A
- Sub channel
CH2 : 2 channels | CH4 : 4 channels | CH6 : 6 channels


TEMP2000M/**/*

- Heater short option (Input 1)
N : None | A : 50A | B : 100A | C : 12A
- Heater short option (Input 2)
N : None | A : 50A | B : 100A | C : 12A




 Various control methods of serve channel

 Available for maximum 7 channel control and monitoring

 Available for constituting the customized operation screen

 SD memory card support

 Total 6 channel digital recording

 CE/IP65 certified product



Product Feature




- Excellent screen quality**
 - 640*480 high resolution, 256K color TFT- LCD application
 - Selection of diverse size 3,7" / 5,7" / 7,5"
- Easy and convenient touch method**
 - Convenient product control and setting using touch screen interface
- Selection of channel for system**
 - Control of 3 channel / 5 channel / 7 channel and selection of recording
- Available for constitution of the user customized operation screen**
 - Available for making drawing in operation screen depending on the user needs (Option)
- Multi language support**
 - Diversified support of language in Korea, English, Chinese and Japanese
- High precision control**
 - ± 0.1% Precision control through input 18 bits A/D converter (0,01°C resolving power)
 - ± 0.3% analog output through output 14 bits D/A converter
- PC software support in free of charge**
 - PC monitoring program
 - Conversion into Excel or TEXT file

Main function


- Diverse control method in sub channel**
 Available for independent control and sync control
 Available for setting the individual operation calibration data in sub channel during sync operation
- Total 6 channel digital recording**
 Real time monitoring and data saving for the present data of main channel, setting data and the present data of output quantity and sub channel
- SD memory card support**
 Data storing into the SD memory card and available for up/down of the set parameter
- Program operation**
 40 pattern, 600 segment, 999H, 59M, 59S setting
 Available for operation of program of sub channel synchronized with main channel
- Individual PID Control**
 Main channel 6 PID
 Sub channel 1 PID/channel
- Digital input 16 point**
 Available for operation/stop, hold/step, pattern selection and error sensing using 16 point DI input signal
 Change of error name and supporting of DO output for DI input
- Digital output 32 point**
 Available for using 72 types of DO signal in main channel and maximum 18 types of DO signal as contact point output
- Operation time management**
 Display of the operation starting time, estimated termination time and operation time up to now
- Supporting the heater short (12A, 50A and 100A)**
 Display by measuring the current flowing in the heater and available for short alarm output
 Use of 800:1 CT
- Input data calibration function**
 Available for entire calibration of overall application and range calibration of sectional application
 Main channel 8 point, sub channel 6 point/ Channel

Diversified screen configuration depending on channel


- 3,5,7 channel screen**
- Display of diverse information**
- Change the tag name for user**




3 channel program operation



5 channel stationary operation

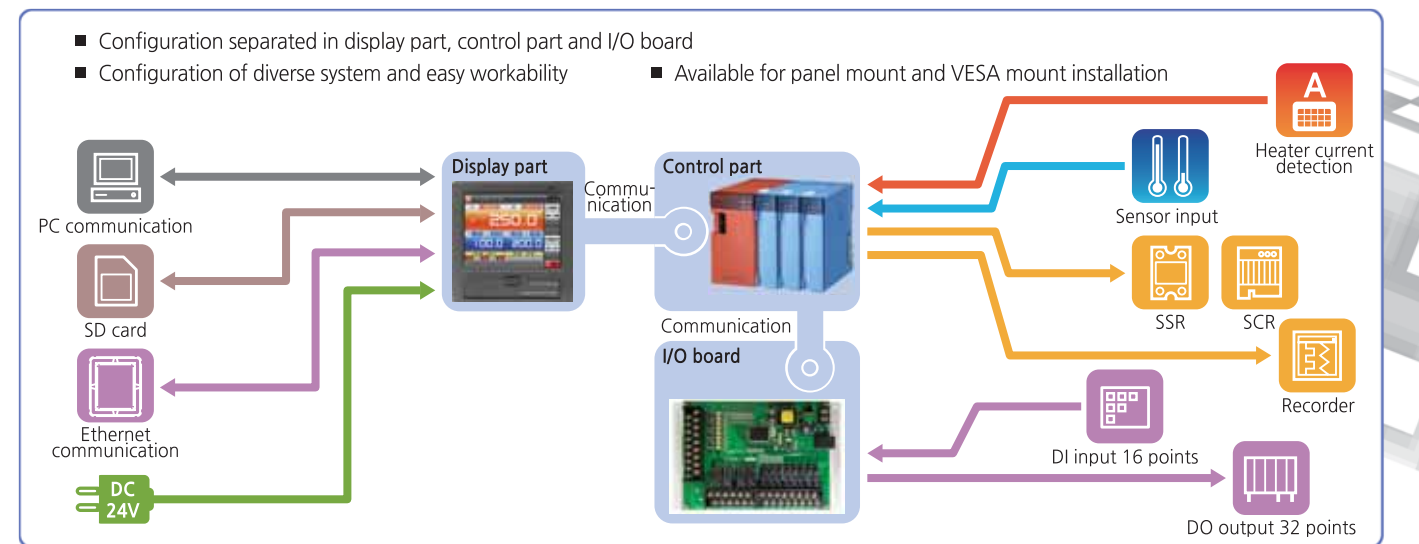


7 channel program operation



Recorder screen

Separation type hardware



Independent control

- It is a type for synchronizing the operation state on the main channel and sub channel and individual setting of data (SP) is available.
- Application system: Multi channel complex chamber, reliability test equipment, semiconductor equipment and ageing chamber and etc

- Main channel : Laboratory Control
- Sub channel1 : ZONE1 Control
- Sub channel2 : ZONE2 Control
- Sub channel3 : ZONE3 Control
- Sub channel4 : ZONE1 OVER TEMP
- Sub channel5 : ZONE2 OVER TEMP
- Sub channel6 : ZONE3 OVER TEMP

Oven for testing the environment reliability

- The main channel controls the program and sub channel controls the stationary control by synchronizing the main channel, operation/stop motion and by individual controlling on the setting temperature (SP).
- The present value (PV) of the main channel and sub channel under controlling can be recorded.

Sync Control

- It is an operating method of synchronizing the operation state and setting value (SP) of main channel with sub channel.W
- Application system: Electric furnace, continuous furnace and ripple lower

Conveyor oven system

- The sub channel can be operated in same set temperature (SP) or in keeping fixed difference depending on the main channel program operation
- The present value (PV) of channel under controlling and distribution level can be recorded by connecting the independent sensor.