



Multi-Channel programmable controller

TEMP 2000M

3CH / 5CH / 7CH SERIES



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 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

- $\pm 0.1\%$ Precision control through input 18 bits A/D converter (0,01°C resolving power)
- $\pm 0.3\%$ 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

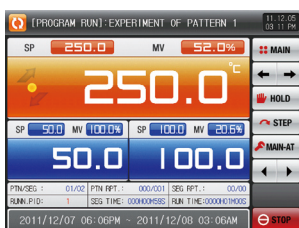
Available for entire calibration of overall application and range calibration of sectional application
 Main channel 8 point, sub channel 6 point/ Channel

Diversified screen configuration depending on channel

■ 3,5,7 channel screen

■ Display of diverse information

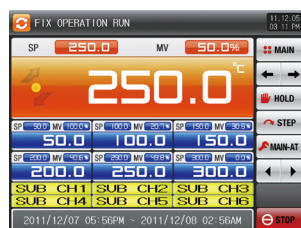
■ Change the tag name for user



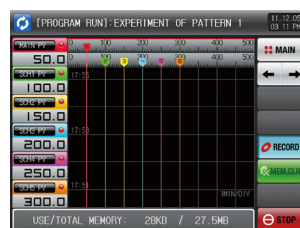
3 channel program operation



5 channel stationary operation

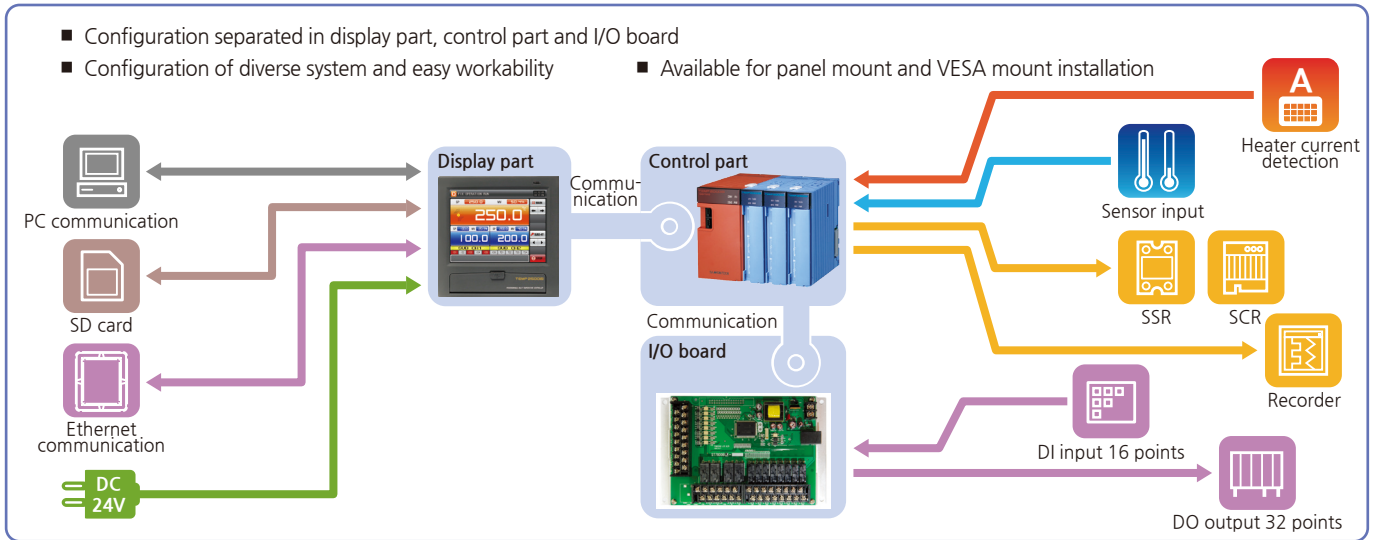


7 channel program operation

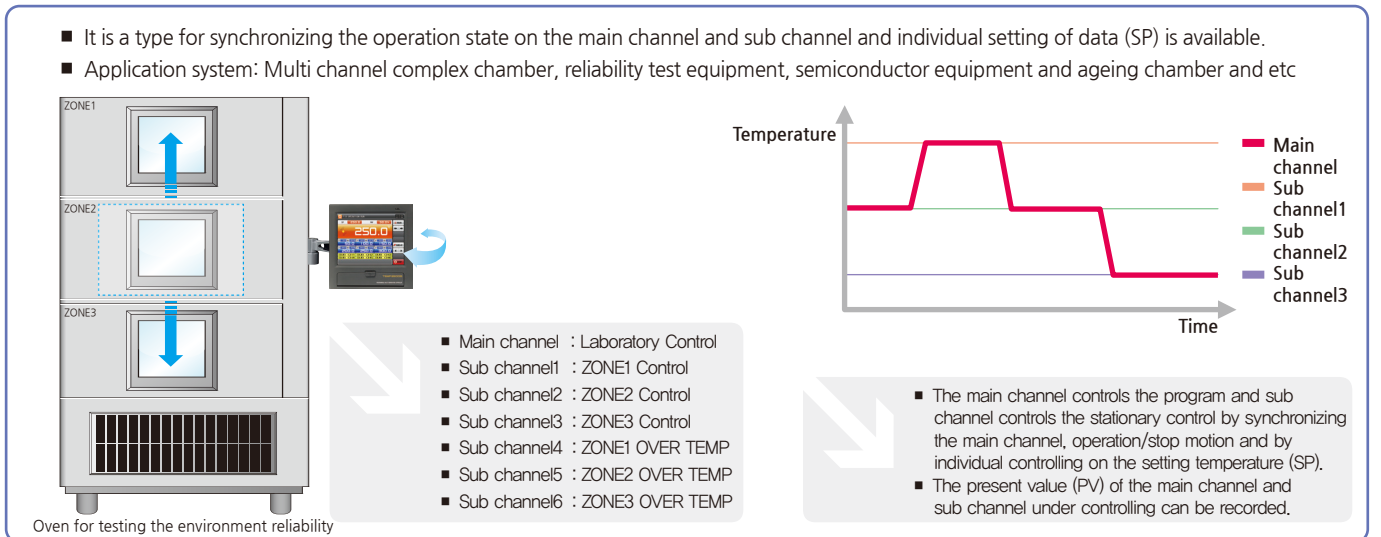


Recorder screen

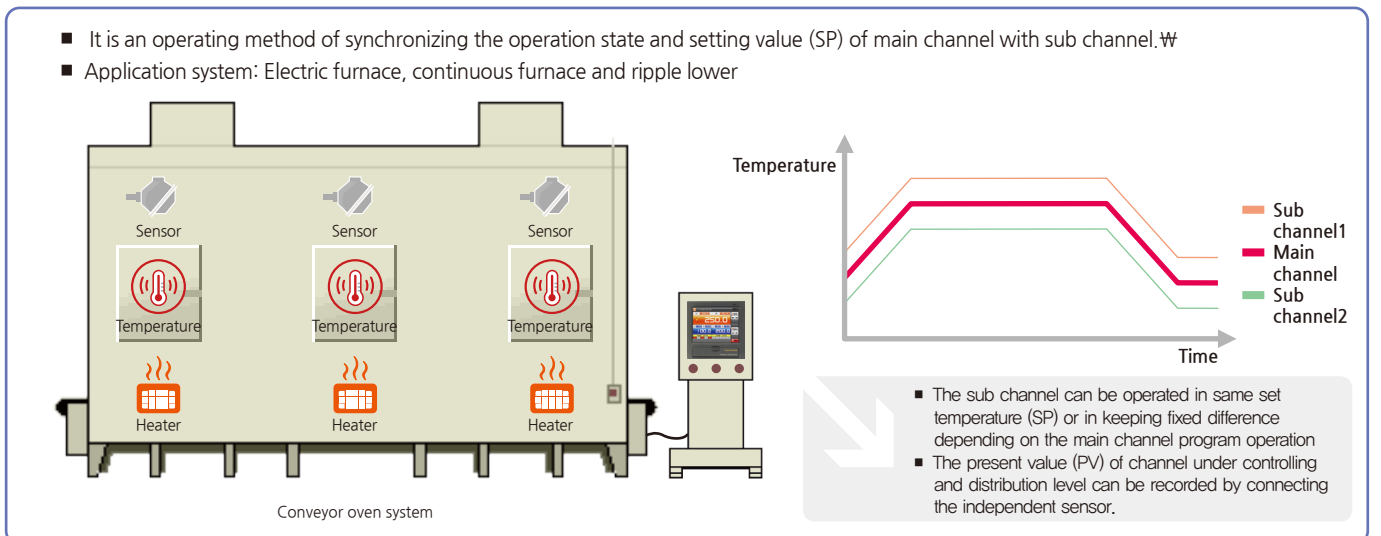
Separation type hardware



Independent control



Sync Control

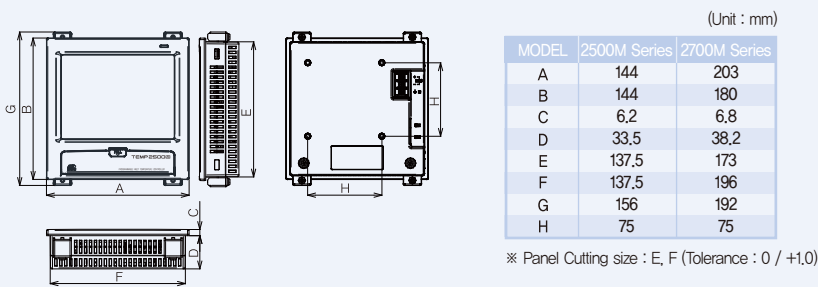


Product Specification

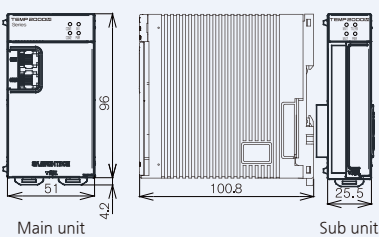
Group	Item	TEMP2500M	TEMP2700M	TEMP2000M		
Screen	Display	5.7" TFT-LCD	7.5" TFT-LCD	-		
	Resolution	640(W) × 480(H)		-		
	Language	Korean, English, Chinese / Korean, English, Japanese		-		
	User screen	Change of initial screen, Electronic album function		-		
	Mount type	Panel mount, VESA mount(MIS-D 75)		-		
Control channel	Operation screen	Basic screen, available for making drawing which meets customer needs(Option)		-		
	Main channel	1 channel		-		
Analog input	Sub channel	-		Selection of 2/4/6 channel		
	Input quantity	1point(Universal input)		2/4/6point(Universal input)		
	Sensor type	TC	K, J, E, T, R, B, S, L, N, U, W, Platinel II, C			
		RTD	Pt100(IEC), Jpt100(JIS), 1/100 Displayable			
		DCV	0.4~2V, 1~5V, 0~10V, -10~20mV, 0~100mV (4~20mV, 0~20mV, External resistance 250Ω, 500Ω Attach) Scale : -1999 ~ 30000			
Sampling period	250ms/Channel					
Input accuracy	±0.1% of full scale ±1 digit					
Analog output	Output specification (Max. 2point)	Voltage output(SSR) 2points ON voltage : 15V DC (Load resistance : Min 600Ω/pulse width : Min 5ms)		1point/Channel		
	Output type	Current output(SSR) 2points 4~20mA DC(Load resistance: Max. 600Ω)		Control output		
Digital input	Contact point specification	Control output/Transmission output(PV, SP)/Auxiliary output				
	Contact point function	Basic 16points(Contact point capacity : Max. 12V DC, 10mA) Selection of operation for A or B point Run/Stop/Hold/Step, selectable run patterns, set DI detect delay time, select DI error monitor(text or picture)				
Digital output	Contact point quantity	Basic 12points(A contact point relay 8points + C contact point relay 4points), Option(A contact point relay 20points) addition function				
	Contact point specification	Normal open(Max. 30V DC/1A, 250V AC/1A), Normal close(Max. 30V DC/1A, 250V AC/1A)				
	Signal type	Inner signal(8points)	On/Off signal(7points)	Logical signal(3points)	Error signal(1point)	User signal(1point)
Heater current detection	Type	12A, 50A, 100A				
	CT sensor/Accuracy	800:1±3% of full scale ±1 digit				
Program	Pattern/Segment	40 pattern/600 segments				
	Segment time	Max. 999hours 59minutes 59seconds				
	Function	Up/Down slope rate, Wait, Operating start code, Pattern name, Power stop mode, PT end mode				
PID control	Repetition	Pattern/Segment repeat operation				
	PID groups	6 PID groups(5 Zone PID groups + 1 Deviation PID group or 6 Seg PID groups)				
Data back-up	Storage media	SD/SDHC card(FAT32 format)				
	Logging function	Program pattern/Parameter set data backup and recovery, available for sectional saving max. 6points out of main channel and sub channel PV				
Communication	Interface	Basic : Flexible to change between RS485/RS232C by DIP switch, Max. 31 nodes, Max. 115,200 bps, Option : Ethernet(TCP/IP) *In case of selection of ethernet, RS232C/485 is not available				
		Power	Rated voltage	24V DC 22VA Max.		
	Lithium battery	For setup data retention(CR2032)				

External dimension and Panel cutting size

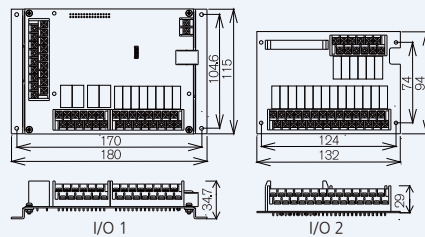
Display part



Control part



I/O Board



Model code

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

- Display LCD size
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



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