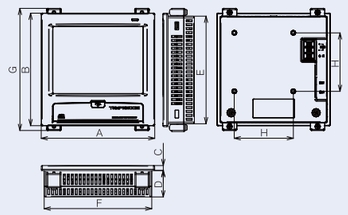
Product Specification

Classification	Items	TEMP2300S	TEMP2500S	TEMP2700S
Screen	Display	3.7" TFT-LCD	5.7" TFT-LCD	7.5" TFT-LCD
	Resolution	640(W) × 480(H)		
	Language	English/Korean/Chinese, English/Korean/Japanese		
	User screen	Change of initial screen image, Electronic album function		
	Mount type	PANEL mount, VESA mount		
Program	Patterns	120 patterns		
	Pattern type (Six types)	① High temp. → Low temp. / ② Low temp. → High temp. / ③ Room temp. → High temp. → Room temp. → Low temp. / ④ Room temp. → Low temp. → Room temp. → High temp. / ⑤ High temp. → Room temp. → Low temp. → Room temp. / ⑥ Low temp. → Room temp. → High temp. → Room temp.		
	Repetition/setting time	Maximum 9999 times /999 Hours 59 Minutes 59 Seconds		
	Function	Standby motion, Pattern name input, Recovery mode after black out, Operation at the termination of pattern		
Operation method	Operation specification	Damper, Elevator type		
	Defrosting method	Heater, Hot gas, Manual defrosting		
PID Control	PID group	Total 4 groups (3 groups of PID range + 1 group of PID deviation), *In case of applying the PID deviation, the Devation value of the high and low temp. room are applied separately		
Analog input	Input specification	3 points of universal input (High Temperature Room, Low Temperature Room and Laboratory Room)		
	Sensor type	T/C	K, J, E, T, R, B, S, L, N, U, W, Platinel II, C	
	Sampling period	500ms		
	Input level	±0.1% ±1digit of Full Scale(A/D 18bits)		
Analog output	Output specification (Maximum 4 points)	Voltage output (SSR) 4 points	ON voltage 24V DC (Load resistor : Min. 600Ω/Pulse width : Min. 5ms)	
		Current output (SCR) 4 points	4~20mA DC (Load resistor : Max. 600Ω)	
	Output type	Control output /Transmission output (High Temperature Room PV, Low Temperature Room PV and Laboratory Room PV)		
	Output level	±0.3%(D/A 14bits)		
Digital input	Contact point specification	Basic 16 points (Contact point capacity : Max. 12V DC, 10mA) Selection of operation for A or B point		
	Contact point function	Operation/Stop, Hold, step, Operation pattern select, Damper sensing for High temp room/Room temp room/Low temp room, Setting the DI sensor detact delay time		
		DI error screen selection (Display of error message and user setting photograph)		
Digital output	Number of contact points	Basic 12 points (8 points of A contact point relay + 4 points of C contact point relay), Option add function (20 point of A contact point relay)		
	Contact points specification	Normal Open(Max. 30V DC/1A, 250V AC/1A), Normal Close(Max. 30V DC/1A, 250V AC/1A)		
	Output type	Inner signal(8 points)	Time signal(4 points)	Alarm signal(4 points)	Freezer signal(2 points)	Sensor short signal(3 points)
		DI signal(16 points)	Manual signal(12 points)	Operation signal(1 point)	Sol valve (1 point)	Operation termination signal(1 point)
		Arithmetic signal(3 points)	Error signal(1 point)	Standby signal(2 points)	User signal(1 points)	N2 gas signal(1 point)
		Fan signal(3 points)	Damper signal(6 points)	Defrosting signal(1 point)	Laboratory signal(3 points)	
Data backup	Storage media	SD/SDHC card (FAT32 format)				
	Function	Program pattern/Backup and recovery of parameter set data, Available for saving the indicated setting value for laboratory, High temperature room and low temperature room				
Communication	Communication specification	Basic : Optional for RS232C/485, Connectable of 31 units in maximum, Communication speed : Max 115,200bps Option : Ethernet (TCP/IP)				
		*In case of selection of Ethernet, RS232C/485 is not available				
Electric power	Electric power/lithium battery	24V DC 22VA Max / Set data reservation (CR2032)				

External dimension and Panel cutting size

Display Part

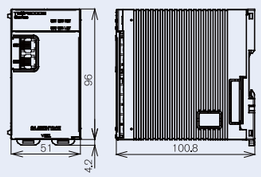
(Unit : mm)



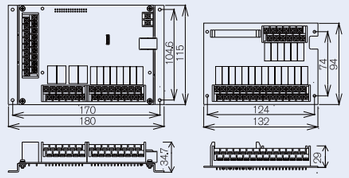
MODEL	2300S Series	2500S Series	2700S Series
A	112	144	203
B	105	144	180
C	6.2	6.2	6.8
D	33.5	33.5	38.2
E	98	137.5	173
F	105	137.5	196
G	117	156	192
H	75	75	75

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

Controlling Part



I/O Board



I/O 1 I/O 2

Model code

TEMP2*00S-0*/*/*

- LCD display size
  3 : 3.7inch | 5 : 5.7inch (IP65 Certificate) | 7 : 7.5inch
- I/O Board
  0 : I/O1 (Relay 12 points) | 1 : I/O1, 2 (Relay 32 points)
- SD card
  SD : SD Card
- Ethernet communication
  CE : Ethernet(TCP/IP)

SDR100(Digital recorder)

It is a paperless full graphic digital recorder and it supports the high resolution TFT-LCD touch screen and SD card and it is a product with speedy graph search function.

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Being the leader of controller market in the 21th century with the best technology

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TEMP2000S SERIES

Thermal Shock Tester Controller

- Damper & Elevator chamber type support
- SD memory card support
- Digital Recorder function
- Separation Type product configuration
- Various Defrosting Type support
- High resolution screen
- CE/IP65 Certificate

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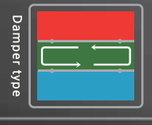
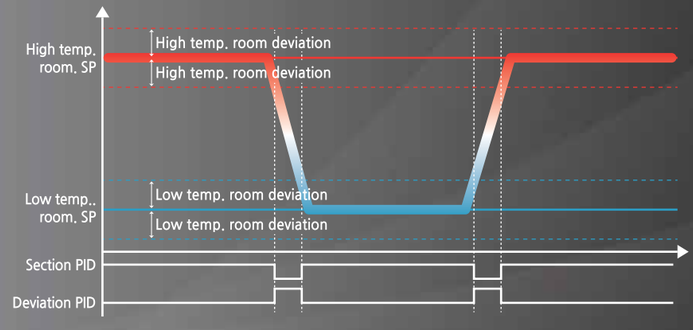
Operation in High Temp. room

Operation in Room Temp. room

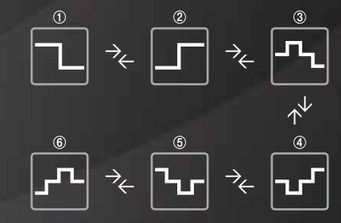


Operation in Low Temp. room

Available for speedy and stable controlling on the rapid ascending/descending section



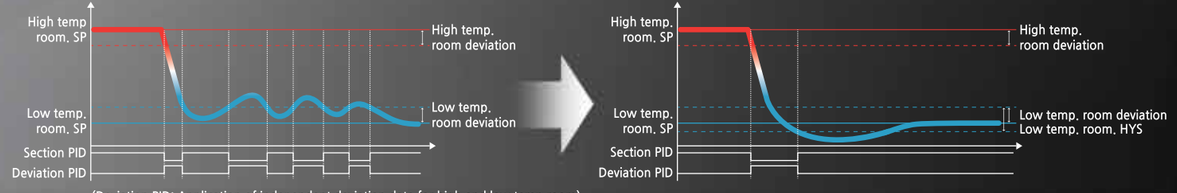
Various pattern programable operation control



Damper type :
Selectable from ① ~ ⑥

Elevator type :
Selectable from either of ① and ②

Available for preventing the initial hunting due to the lack of freezing capacity in low temperature room with adoption of low temp. room deviation hysteresis



(Deviation PID: Application of independent deviation data for high and low temp room)

Main Functions

Easy and Convenient Touch Type
Easy operation and setting
using touch screen interface

Digital Graphic Recording Function
Real-time Monitoring & Data manage Operation Status of Present Value(Zone of Experiment, High, Low) through Full Digital Graph

Various Pattern Operations
Six types programmable operation
Total 120 pattern/999,59M, 59S

Standby Type Select
In case Operation Starts, select Standby-act(Pre-Heating, Pre-Cooling) & select conditions for Standby-act cancel

Various Defrosting Methods
Heater1 type(Defrosting during pre-set time), Hot-gas type, Manual type and Heater2 type(Present value = Defrosting for set time from set value)

Digital Input
Operation/stop, hold/step, pattern selection, damper sensing and error detection are available by using the 16 points DI input signal and it supports the DO output for error name change and DI input

Digital Output
73 types of DO signals (Arithmetic, DI, Damper, IS, TS, ALM, RUN) are available with 32 points (12+20) contact point output

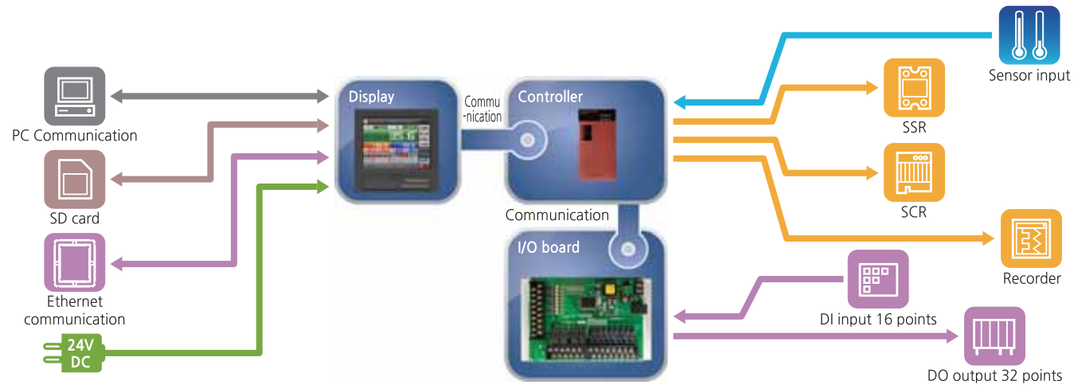
Powerful Communication Environment
Basic include RS232C/485 serial communication (Communication speed 115,200bps)
Ethernet support option

Multi Language Manu
Supporting of various languages of Korean, English and Chinese / Korean, English and Japanese and it is appropriate for globalization

Function of Input Data Calibration
Available for entire calibration for general application and sectional calibration
8 points of calibration in laboratory section

Separated Type Hardwares

- Configuration in separation of display, controller and input/output board
- Function of Panel mount and VESA mount
- Configuration of various system and easy workability



Parameter Backup and Recording

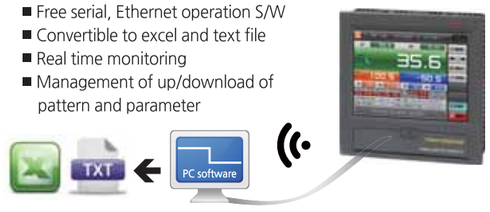
- Setting the SD card saving
- Digital recording screen

Available for up/down of the pattern and paramete

Available for saving into internal memory and SD card

Free Operation S/W

- Free serial, Ethernet operation S/W
- Convertible to excel and text file
- Real time monitoring
- Management of up/download of pattern and parameter

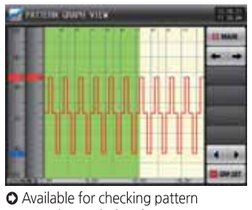


Various Screen Configuration for Easy Operation

- Pattern editing screen

Setting the repetition, standby and defrosting in each pattern

- Pattern graph display screen

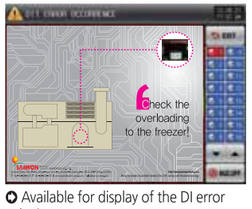


Available for checking pattern repeating period and progress

- Saving graph checking screen

Available for checking the saved graph and SD card

- DI error screen (Images)



Available for display of the DI error by images