

CLIMATIC CHAMBER



JSR

[주] 제이에스리서치
JS Research Inc.

Climatic CHAMBER

TEMPERATURE & HUMIDITY

Environmental Control

JSCH-Series Table Top



Temperature Range
- 20 °C ~ 120 °C



Humidity Range
40 % ~ 95 % RH



Program Controller
LCD Display
10 Patterns 100 Segments



[OPTION] RS-232C or 485
Serial Interface
Multi-Drop up to 31 Instruments

JSRH-Series Premium Model



Temperature Range
- 40 °C ~ 150 °C



Humidity Range
35 % ~ 98 % RH



Touch Screen
5.6" Color TFT Display
120 Patterns 1200 Segments



RS-232C or 485 Serial Interface
Multi-Drop up to 31 Instruments



Data Storage
SD or MMC Card



Temp. & Humidity
Trend Data Recording

MODEL	CAPACITY	TEMPERATURE	HUMIDITY
JSCH-070CP	70 L	10 °C ~ 80 °C	60 ~ 90 % RH
JSCH-100CP	100 L		
JSCH-070CPL	70 L	-20 °C ~ 120 °C	40 ~ 95 % RH
JSCH-100CPL	100 L		

MODEL	CAPACITY	TEMPERATURE	HUMIDITY
JSRH-150CP	150 L	-20 °C ~ 150 °C	35 ~ 98 % RH
JSRH-250CP	250 L		
JSRH-500CP	500 L		
JSRH-800CP	800 L		
JSRH-150CPL	150 L	-40 °C ~ 150 °C	35 ~ 98 % RH
JSRH-250CPL	250 L		
JSRH-500CPL	500 L		
JSRH-800CPL	800 L		

JSTH-Series Floor Standing



Temperature Range
- 20 °C ~ 120 °C



Humidity Range
35 % ~ 98 % RH



Program Controller
LCD Display
10 Patterns 100 Segments



[OPTION] RS-232C or 485
Serial Interface
Multi-Drop up to 31 Instruments

Battery Test Chamber Drug Stability Chamber



Temperature Range
+0 °C ~ 70 °C



Humidity Range
30 % ~ 85 % RH



Constant Temperature
Controller



Touch Screen
5.6" Color TFT Display
120 Patterns 1200 Segments



RS-232C or 485 Serial Interface
Multi-Drop up to 31 Instruments



Temp. & Humidity
Trend Data Recording

MODEL	CAPACITY	TEMPERATURE	HUMIDITY
JSTH-150CP	150 L	10 °C ~ 80 °C	60 ~ 90 % RH
JSTH-250CP	250 L		
JSTH-500CP	500 L		
JSTH-800CP	800 L		
JSTH-150CPL	150 L	-20 °C ~ 120 °C	50 ~ 95 % RH
JSTH-250CPL	250 L		
JSTH-500CPL	500 L		
JSTH-800CPL	800 L		

MODEL	CAPACITY	TEMPERATURE	HUMIDITY
JSBS-150C	150 L	+0 °C ~ 70 °C	-
JSBS-250C	250 L		
JSBS-420C	420 L		
JSBS-520C	520 L		
JSDS-300C	300 L	+10 °C ~ 70 °C	30 ~ 85 % RH
JSDS-420C	420 L		
JSDS-960C	964 L		

Climatic CHAMBER

TEMPERATURE & HUMIDITY Environmental Control

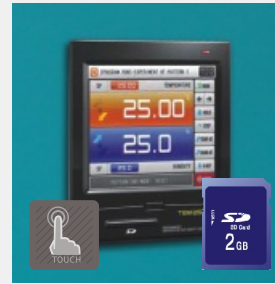
JSC-950 JSRH-Basic Control

JSC-2500 JSRH-Optional Control



5.6" TFT-LCD

- ▶ High Resolution 640 x 480
- ▶ 64 MB internal memory including trend data, set up parameter storage



5.7" TFT-LCD

- ▶ High Resolution 640 x 480
- ▶ SD Memory Card Data in internal memory including trend data, set up parameter saved in SD memory Card



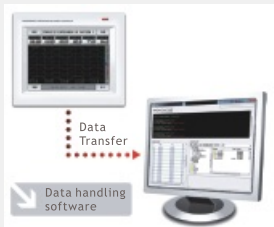
Programming

- ▶ 120 Patterns 1200 Segments up to 999 hour 59 min 59 sec
- ▶ 9 Zone PID Groups



Programming

- ▶ 120 Patterns 1200 Segments up to 999 hour 59 min 59 sec
- ▶ 9 Zone PID Groups



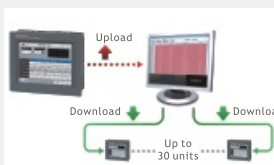
Data Transfer

- ▶ Uploading data, pattern, parameter from memory to PC
- ▶ Data monitoring PC Software



Monitoring

- ▶ Displays real time trend graph
- ▶ Displays recorded trend graph
- ▶ Records data into memory



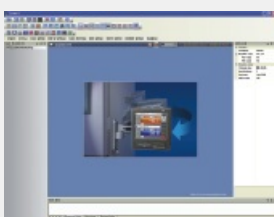
Pattern Editing

- ▶ Saved pattern can be recalled as graphical interface
- ▶ Easy uploading and downloading parameters and patterns



Easy-to-Use

- ▶ User interface allows easy pattern program editing
- ▶ Displays graphical pattern



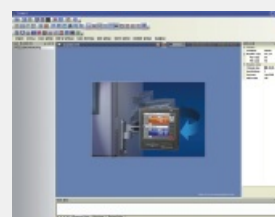
PC Software

- ▶ Control and Monitoring software
- ▶ RS-232C or RS-485 Multi-Drop Communication



Pattern Editing

- ▶ Saved pattern can be recalled as graphical interface
- ▶ Easy uploading and downloading parameters and patterns



PC Software

- ▶ Control and Monitoring software
- ▶ SD Memory Card Data Handling
- ▶ RS-232C or RS-485 Multi-Drop Communication

Convenience

Optional Accessories

▶ Access Port



- ▶ Φ 50 mm with screw cap to connect cables in the chamber
- ▶ Φ 50 mm의 액세스 포트 편리하게 챔버 내부로 각종 케이블을 연결

▶ Chart Recorder



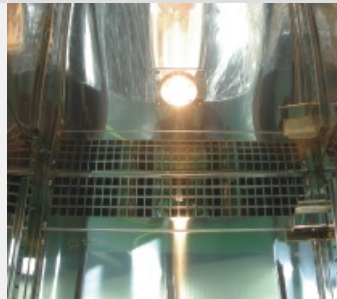
- ▶ Temperature and humidity trend monitoring and data storage
- ▶ 온습도 데이터 기록과 보관을 위한 6채널 차트 레코더

▶ Easy Maintenance



- ▶ Easy to access maintenance system
- ▶ 유지보수를 위한 편리한 점검구

▶ Chamber Light



- ▶ Helps convenient monitoring of chamber during operation (JSRH-models only)
- ▶ 작동 중 챔버의 내부를 손쉽게 관찰 하기 위한 조명등 (JSRH-모델)

▶ Water Tank



- ▶ Built-in water tank for humidifier (JSRH-models only)
- ▶ 가습을 위한 내장형 급수탱크 (JSRH-모델)

▶ Glass Window Heater



- ▶ Removes fog and frost to keep clear view (JSRH-models only)
- ▶ 김서림을 방지하는 열선 투시창 (JSRH-모델)

Climatic CHAMBER

TEMPERATURE & HUMIDITY JSTH-Series



Temp. - 20 °C ~ 120 °C



Humidity 50 % ~ 95 % RH



Program Controller
10 Patterns 100 Segments

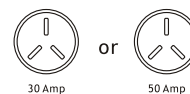


RS-232C or 485 Serial Interface
Multi-Drop up to 9 Instruments

Specifications

Temp. Range	- 20 °C ~ 120 °C (+10 °C ~ 80 °C)
Accuracy	± 0.2 °C at 20°C (JSTH-150)
Uniformity	± 0.7 °C at 20°C (JSTH-150)
Humidity Range	50 % ~ 95 % RH
Accuracy	± 0.3 % at 60 % (JSTH-150)
Uniformity	± 1.0 % at 60 % (JSTH-150)
Control	Graphic LCD Programmable Control 10 Patterns 100 Segments RS-232C or RS-485 Multi-Drop [OPTION]
Sensor	Temperature Class A Pt-100 Ω Sensor Humidity Electronic Sensor
Safety	Over-Temperature Cut-Off Over Current Cut-Off
Material	Body : Epoxy Powder Coated Steel Chamber : Stainless Steel 304
Electric	JSTH-150, JSTH-250 220 ± 10% VAC 50/60Hz 1-Phase JSTH-500, JSTH-800 220 ± 10% VAC 50/60Hz 1-Phase or 380 ± 10% VAC 50/60Hz 3-Phase 4-Wire

Plug config.



30 Amp

50 Amp

Control Accuracy

- ▶ Graphic LCD Programmable PID Controller
 - ▶ 10 Patterns memory 100 Segments 999 times repeatable
 - ▶ RS-232C or RS-485 Multi-Drop serial communication up to 9 instruments and PC software [OPTION]
 - ▶ Maximum 6 zone PID group for different temperature and humidity range for better control accuracy
 - ▶ Temperature calibration and auto-tuning function
 - ▶ Class A Pt-100 Ω sensor and electronic humidity sensor
- ▶ 해상도 ±0.1 °C, 0.1% RH의 정밀한 PID 컨트롤러
 - ▶ 10패턴 저장 메모리 100세그먼트, 999회 또는무한 반복운전
 - ▶ RS-232C, RS-485 다중 통신 지원으로 9대 까지 PC 제어 지원
 - ▶ 작동되는 온습도 구간별로 6개의 zone PID 제어
 - ▶ 온도보정, 오토튜닝 기능 내장
 - ▶ Class A Pt-100 Ω 온도 센서, 전자습도센서

Performance

- ▶ Ideal for ambient range temperature and humidity test
- ▶ Optimized control system for ambient conditions allows long term stability and reliability test at constant temperature and humidity condition
- ▶ 좁은 온도와 습도 범위에서 최상의 제어 능력을 발휘하도록 설계되어 일반적인 조건의 테스트에 적합
- ▶ 최적화된 온습도 제어능력으로 고정된 온도와 습도에서의 장기간의 안정성, 신뢰성 테스트에 적합

Convenience

- ▶ Outer door with double gasket and compression door lock
- ▶ Φ 50mm access port for easy connection of cables
- ▶ Triple layered sight glass window
- ▶ 이중 도어패킹과 밀착력이 뛰어난 원터치 압착 도어 잠금 장치
- ▶ Φ 50 mm의 액세스 포트는 편리하게 챔버 내부로 케이블 연결
- ▶ 삼중 유리 투시창

Safety

- ▶ DUAL OVER TEMP. CUT-OFF
- ▶ MAX TEMP CUT-OFF
- ▶ LOW WATER LEVEL ALARM
- ▶ OVER CURRENT CUT-OFF : Electrical Leakage Breaker

Accessories

Art No.	Descriptions
OER-010	6-Channel Chart Recorder
	Perforated Shelf, Stainless Steel 304
PHS-A06	for JSTH-150 W470 x D480 mm
PHS-A09	for JSTH-250 W570 x D580 mm
PHS-A19	for JSTH-500 W770 x D680 mm
PHS-A16	for JSTH-800 W970 x D780 mm

Ordering Information

	JSTH-150CP	JSTH-250CP	JSTH-500CP	JSTH-800CP
Control Range	+ 10 °C ~ 80 °C (without humidity) 60 % ~ 90 % RH			
	JSTH-150CPL	JSTH-250CPL	JSTH-500CPL	JSTH-800CPL
Control Range	- 20 °C ~ 120 °C (without humidity) 50 % ~ 95 % RH			
Chamber Volume (Capacity)	150 L	252 L	448 L	800 L
Temperature Accuracy at 20.0°C	± 0.2 °C	± 0.3 °C	± 0.3 °C	± 0.4 °C
Uniformity at 20.0°C	± 0.7 °C	± 0.7 °C	± 1.0 °C	± 1.2 °C
Humidity Accuracy at 60.0 %	± 0.3 %	± 0.4 %	± 0.4 %	± 0.8 %
Uniformity at 60.0 %	± 1.0 %	± 1.5 %	± 1.8 %	± 2.5 %
Dimensions Inner	500 x 500 x 600	600 x 600 x 700	800 x 700 x 800	1000 x 800 x 1000
W x D x H mm Outer	1030 x 905 x 1505	1130 x 1005 x 1655	1380 x 1135 x 1805	1530 x 1235 x 2035
No. of Shelves / Maximum No.	2 / 20	3 / 24	3 / 24	4 / 24
Cable Port	Φ 50 mm			
Water Tank	External Supply			
Heater Capacity	4.5 kW	4.8 kW	5.5 kW	6.0 kW
Refrigeration System	CFC Free Air Cooled Compressor			
Power Rating	24.1 (24.8) Amp	25.7 (26.1) Amp	29.3 (30.5) Amp	32.1 (35.2) Amp
Power Plug	30 AMP	30 AMP	30 AMP	50 AMP

Specifications in () for CPL series