ESPEC

Bench-Top Type Temperature (& Humidity) Chamber

SH-221・241・261・641・661
SU-221・241・261・641・661

CAT.NO.E01111-Y207

Compact design for personal use
Ready to network with your computer.

Introducing a new lineup of our Bench-top Type Temperature (& Humidity) Chamber Series.
Our latest models achieve superb performance in a compact size,
and attains temperatures as low as －20℃/－40℃/－60℃, with capacity of 20L or 60L.
They provide high performance and quality features with new capabilities for integration
with our information network system,〈E-PILOT 21〉.
It is useful for centralized control and data processing, as well as operating chamber control
and specimen measurement at the same time. All brought to you by ESPEC.

Viewing window and stand are optional

Utility

SU 60L model

SH-661

Small size & light weight

Chamber size is a compact 440W × 560H × 695Dmm (excluding protrusion), while its weight is only 66kg. Ensured the inside test area dimension at 300W × 300H × 250Dmm.
(SU-221・241 100VAC model) .

Compact design with high performance ——— SH-661

The new model SH-661 achieves −60 to +150℃/ 30 to 95%rh in a compact design, and shows outstanding performance than any other previous benchtop models.

Select your optimum chamber from a full variation

The series provide six variations in temperature (& humidity) range of −20℃/−40℃/−60℃ to +150℃ (and 30 to 95%rh), and two capacities of 20L or 60L, with a total of 10 models altogether. A wide temperature (& humidity) range is offered in a benchtop model, enabling you to choose the right chamber.

User-friendly

Newly developed refrigeration system that saves energy consumption up to 55%

Our exclusive refrigerator capacity variable control system saves up to 55% energy consumption compared to our previous model.

Optional stand for space-saving layout

For use in limited space, we provide an exclusive stand with casters for stacking up to three chambers.

*Be sure to secure the stand onto the floor with earthquake resistant fittings for your safety when using stand.

Recycling

Molded resin and metal parts which can be recycled are clearly marked to make recyclable materials easier to identify during disassembly.

Ozone layer protection

The HFC refrigerant used is completely safe for the ozone layer.

Cable port flug (Material marked)

User-friendly

Water supply tank

Right-opening door

Viewing window: 20L model

Cable ports for running in wires

Each one 25mm diameter cable port is standard equipped on both sides of the chamber for wiring to the specimen. We also provide 50mm, 100mm diameter port and flat type cable port.

Cartridge tank for easy water supply

Once water is supplied into the tank, continuous operation is maintained for three days. Maintenance can be done easily from the front side. Additional water tank connection is available for further extended operation. (SH model)

Right-opening door (optional)

You may want to change the direction of opening the door to fit the installation space.

Viewing window for observation (optional)

A large window provides a clear view of your specimen during testing.
(215W × 215Hmm for 20L model, 215W × 315Hmm for 60L model)

*The basic specification of the chamber will be modified.

Flexible Computer Interface

Communication port RS-485 is equipped as standard. You can select RS-232C, GP-IB, and E-BUS communication port as option.

Control operation

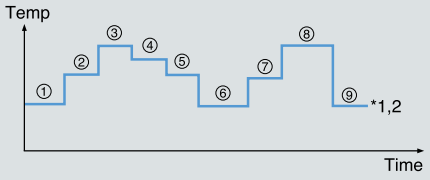
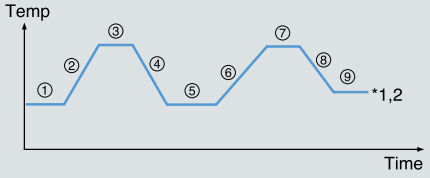
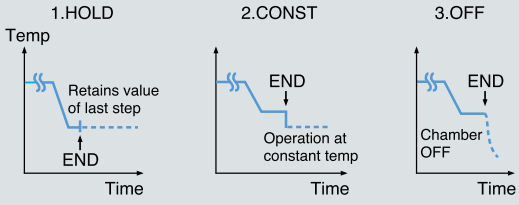
Easy operation with 9 keys

Temperature & humidity setting, timer setting, and upper/lower temperature & humidity limit alarm setting can be done with simple key operation.

Programming operation of up to 9 steps

In addition to constant setting, programming instrumentation is equipped to allow programmable operation to a maximum of 9 steps per pattern and the rise and fall gradient of temperature (& humidity) to be set to meet the application requirements for temperature characteristic testing and temperature (& humidity) cycle testing. Maximum 99-time repeat function and operational setting function after program execution are just two of the various functions offered.

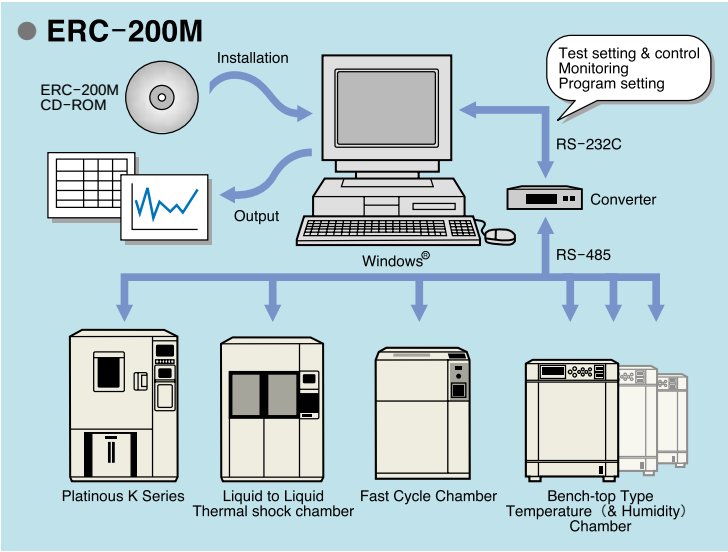
Description of program function

Program function	Pattern
Step program	
Temperature gradient program	
Termination program	

*1 Sets a program repetition frequency between a range of 1 and 99.

*2 Selects HOLD, CONST or OFF when a program is over.

Network



Communication Network of Environmental Test Chambers

Bench-top type temperature & humidity chamber incorporates the communication port RS-485 as standard to cope with the [E-PILOT 21], which is a newly developed centralized control system. [E-PILOT 21] not only serves as a system for centralized control of environmental chambers, but also establishes an open network including specimen measurement function and remote chamber main-tenance function.

E-PILOT《ERC-100S》

The high-level of functions offered by ERC-200M is included in a non-networked package, meant for a single chamber to be interfaced with your personal computer. The RS-232C communications port option is required, but the software is free.

●For one-to-one users

If you are not ready to establish a network of test chambers, this software would be an ideal trial of the capabilities of our ERC-200M package.

●Freeware

ERC-100S can be downloaded from our website for free at *www.espec.co.jp/english*.

E-PILOT《ERC-200M》

Control, monitoring, programming, and datalogging for up to 16 ESPEC chambers can be performed through a single PC. RS-485 from ESPEC chambers connect via a serial bus converter to RS-232C on the PC.

●Remote operation

Have full control of test chambers while sitting in your office.

●Potential savings

Because the ERC-200M allows program operations to be run directly from the PC, test chambers with less-expensive single-setting controllers can be used.

●E-BUS version available

For existing units with E-BUS system, ERC-100M is available.

* The series of application softwares and network systems are provided on a separate basis from the chamber.

E-PILOT《ERC-300M》

Set up an Intranet Web-PILOT site to allow monitoring of up to 16 chambers through one PC (possible with E-BUS communications system). Monitor the settings and operation of your chambers from any PC on the Intranet. Web-based method allows display of chamber information across many computer platform types.

E-PILOT《Lab-VIEW》

For use in applications where LabVIEW software is needed to integrate ESPEC chambers with other equipment such as power supplies or measurement equipment. Optional GP-IB (IEEE-488) communications interface is required.

●Driver software to connect test chambers are provided for free

Lab VIEW drivers are available to give the basic building blocks for addressing ESPEC equipment. Drivers required for connecting ESPEC products to a personal computer is provided for free. For further information, please contact your nearby ESPEC sales office.

CMS-J30

This is a fully customizable system that provides centralized control, centralized monitoring, remote operation and specimen data management of ESPEC products (up to 32 units of which 16 are dedicated to centralized monitoring) by the use of a PC. (E-BUS compatible)

* Please contact us for further information.

SH

Model		SH-221	SH-241	SH-261	SH-641	SH-661
Power supply		100VAC 1φ 50/60Hz 115VAC 1φ 60Hz 220VAC 1φ 50/60Hz 230VAC 1φ 50Hz			100VAC 1φ 50/60Hz 200VAC 1φ 50/60Hz 220VAC 1φ 50/60Hz 230VAC 1φ 50Hz	
Maximum current *1	100V	12.5A		13.5A	18.0A	
	115V	12.0A		13.0A	———	
	200V	———			10.0A	
	220V	7.0A		7.5A	9.0A	
	230V	6.5A		7.0A	8.5A	
Temperature and humidity control system		Balanced Temperature & Humidity Control system (BTHC system)				
Operable ambient temperature range		+5 to +35℃ (+41 to +95˚F)				
Noise		At 1m from front of chamber, 1.2m from floor: 55dB (depending on environment)				
Performance *2	Temperature range *3	−20 to +150℃ (−4 to +302˚F)	−40 to +150℃ (−40 to +302˚F)	−60 to +150℃ (−76 to +302˚F)	−40 to +150℃ (−40 to +302˚F)	−60 to +150℃ (−76 to +302˚F)
	Humidity range *3	30 to 95%rh (Refer to diagram of temperature & humidity control range)				
	Temperature fluctuation *3	±0.3℃ (−20 to +100℃) [±0.54˚F (−4 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−40 to +100℃) [±0.54˚F (−40 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−60 to +100℃) [±0.54˚F (−76 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−40 to +100℃) [±0.54˚F (−40 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−60 to +100℃) [±0.54˚F (−76 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]
	Humidity fluctuation *3	±3.0%rh				
	Temperature uniformity *3	±0.5℃ (−20 to +100℃) [±0.9˚F (−4 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−40 to +100℃) [±0.9˚F (−40 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−60 to +100℃) [±0.9˚F (−76 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−40 to +100℃) [±0.9˚F (−40 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−60 to +100℃) [±0.9˚F (−76 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]
	Humidity uniformity *3	±3.0%rh				
	Temperature heat-up rate	−20 to +150℃ within 55 min	−40 to +150℃ within 60 min	−60 to +150℃ within 70 min	−40 to +150℃ within 70 min	−60 to +150℃ within 80 min
	Temperature pull-down rate	+20 to −20℃ within 20min	+20 to −40℃ within 50min	+20 to −60℃ within 70min	+20 to −40℃ within 60min	+20 to −60℃ within 90min
	Lowest attainable temperature	−20℃ (−4˚F)	−40℃ (−40˚F)	−60℃ (−76˚F)	−40℃ (−40˚F)	−60℃ (−76˚F)
Construction	Exterior material	Cold rolled and rust-proof steel plate, Melamine finish				
	Interior material	18-8 Cr-Ni stainless steel plate (SUS 304)				
	Insulation	Rigid polyurethane foam, Glass wool				
	Door	one-panel door (right handle, left hinge)				
	Instrumentation panel	Temperature & humidity indicator controller, Overheat protector, Overcool protector				
	Heater	Nichrome-stripped wire heater 400W			600W	
	Humidifier	18-12-2.5 Cr-Ni-Mo stainless steel sheathed heater 250W				
	Refrigeration system	Mechanical single-stage refrigerator system			Mechanical cascade condenser refrigeration system	
	Cooler	Plate fin cooler				
	Refrigerator	Compressor: Air-cooled hermetically sealed compressor, Condenser: Air-cooled condenser, Expansion mechanism: Capillary tube				
	Refrigerator capacity	400W		400W+400W		
	Refrigerant	R404A		R404A, R23		
	Fittings	Connecting terminal for temp & humid recorder terminal, Specimen power supply control terminal, External alarm terminal, External output terminal, Cable ports, Power cord/ plug, Drain pipe, Water supply tank, Quick on/ off plug for water drainage, Water level sensor for water supply tank/ drain socket for tank				
Dimensions	Inside dimensions (W×H×D mm/ in)	300×300×250/ 12×12×10 (excluding protrusions)			400×400×400/ 16×16×16 (excluding protrusions)	
	Outside dimensions (W×H×D mm/ in)	440×630×695/ 17.6×25.2×27.8 (730/ 28.7D when including protrusions)		440×630×785/ 17.6×25.2×31.4 (825/ 33D when including protrusions)	540×730×890/ 21.6×29.2×35.6 (930/ 37.2D when including protrusions)	
Capacity (L)		22.5			64	
Weight (kg)		71 (76 for 115, 220, 230V)		100	122	

*1 At +23℃ ambient temperature, value at stable voltage application. For SH-641/ 661, make sure to check the capability of your power equipment in advance.

*2 At +23℃ ambient temperature, value at stable voltage application with no specimen. Lowest attainable temperature value at ambient of up to +30℃.

*3 In accordance with Standard for Performance of Humidity Chamber (JTM-K01-1998) of standard of Japan Testing Machinery Association.

SU

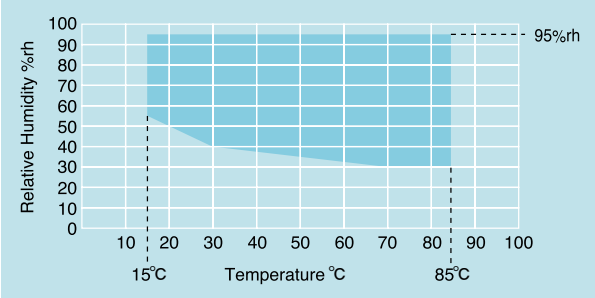
Model		SU-221	SU-241	SU-261	SU-641	SU-661
Power supply		100VAC 1φ 50/60Hz 115VAC 1φ 60Hz 220VAC 1φ 50/60Hz 230VAC 1φ 50Hz			100VAC 1φ 50/60Hz 200VAC 1φ 50/60Hz 220VAC 1φ 50/60Hz 230VAC 1φ 50Hz	
Maximum current *1	100V	10.0A		13.5A	18.0A	
	115V	9.5A		13.0A	———	
	200V	———			10.0A	
	220V	6.0A		7.5A	9.0A	
	230V	5.5A		7.0A	8.5A	
Temperature control system		Balanced Temperature control system (BTC system)				
Operable ambient temperature range		+5 to +35℃ (+41 to +95˚F)				
Noise		At 1m from front of chamber, 1.2m from floor: 55dB (depending on environment)				
Performance *2	Temperature range *3	−20 to +150℃ (−4 to +302˚F)	−40 to +150℃ (−40 to +302˚F)	−60 to +150℃ (−76 to +302˚F)	−40 to +150℃ (−40 to +302˚F)	−60 to +150℃ (−76 to +302˚F)
	Temperature fluctuation *3	±0.3℃ (−20 to +100℃) [±0.54˚F (−4 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−40 to +100℃) [±0.54˚F (−40 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−60 to +100℃) [±0.54˚F (−76 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−40 to +100℃) [±0.54˚F (−40 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]	±0.3℃ (−60 to +100℃) [±0.54˚F (−76 to +212˚F)] ±0.5℃ (+100.1 to +150℃) [±0.9˚F (+212.1 to +302˚F)]
	Temperature uniformity *3	±0.5℃ (−20 to +100℃) [±0.9˚F (−4 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−40 to +100℃) [±0.9˚F (−40 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−60 to +100℃) [±0.9˚F (−76 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−40 to +100℃) [±0.9˚F (−40 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]	±0.5℃ (−60 to +100℃) [±0.9˚F (−76 to +212˚F)] ±0.8℃ (+100.1 to +150℃) [±1.44˚F (+212.1 to +302˚F)]
	Temperature heat-up rate	−20 to +150℃ within 55 min	−40 to +150℃ within 60 min	−60 to +150℃ within 70 min	−40 to +150℃ within 70 min	−60 to +150℃ within 80 min
	Temperature pull-down rate	+20 to −20℃ within 20min	+20 to −40℃ within 50min	+20 to −60℃ within 70min	+20 to −40℃ within 60min	+20 to −60℃ within 90min
	Lowest attainable temperature	−20℃ (−4˚F)	−40℃ (−40˚F)	−60℃ (−76˚F)	−40℃ (−40˚F)	−60℃ (−76˚F)
Construction	Exterior material	Cold rolled and rust-proof steel plate, Melamine finish				
	Interior material	18-8 Cr-Ni stainless steel plate (SUS 304)				
	Insulation	Rigid polyurethane foam, Glass wool				
	Door	one-panel door (right handle, left hinge)				
	Instrumentation panel	Temperature indicator controller, Overheat protector, Overcool protector				
	Heater	Nichrome-stripped wire heater 400W			600W	
	Refrigeration system	Mechanical single-stage refrigerator system			Mechanical cascade condenser refrigeration system	
	Cooler	Plate fin cooler				
	Refrigerator	Compressor: Air-cooled hermetically sealed compressor, Condenser: Air-cooled condenser, Expansion mechanism: Capillary tube				
	Refrigerator capacity	400W		400W+400W		
	Refrigerant	R404A		R404A, R23		
	Fittings	Connecting terminal for temp recorder terminal, Specimen power supply control terminal External alarm terminal, External output terminal, Cable ports, Power cord/ plug, Drain pipe				
Dimensions	Inside dimensions (W×H×D mm/ in)	300×300×250/ 12×12×10 (excluding protrusions)			400×400×400/ 16×16×16 (excluding protrusions)	
	Outside dimensions (W×H×D mm/ in)	440×560×695/ 17.6×25.2×27.8 (730/ 28.7D when including protrusions)		440×560×785/ 17.6×22.4×31.4 (825/ 33D when including protrusions)	540×660×890/ 21.6×26.4×35.6 (930/ 37.2D when including protrusions)	
Capacity (L)		22.5			64	
Weight (kg)		66 (71 for 115, 220, 230V)		95	115	

*1 At +23℃ ambient temperature, value at stable voltage application. For SH-641/ 661, make sure to check the capability of your power equipment in advance.

*2 At +23℃ ambient temperature, value at stable voltage application with no specimen. Lowest attainable temperature value at ambient of up to +30℃.

*3 In accordance with Standard for Performance of Humidity Chamber (JTM-K01-1998) of standard of Japan Testing Machinery Association.

TEMPERATURE & HUMIDITY CONTROL RANGE (SH type only)



※At +23℃ anbuebt temperature.

MODEL

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- Temperature range: 2: −20 to +150℃; 4: −40 to +150℃; 6: −60 to +150℃
- Capacity: 2: 22.5L; 6: 64.0L
- H: Low temperature & humidity chamber; U: Low temperature chamber

TEMPERATURE (& HUMIDITY) PROGRAM INDICATOR CONTROLLER

Model	ES-102
Operation mode	Program operation, Constant operation
Display	7-segment LED display
Setting	Mechanical key input
Program capacity	9 steps/ 1 pattern (1 to 99 repetitions)
Setting and indication ranges	Temp :−25 to +155℃ (SH-221, SU-221) :−45 to +155℃ (SH-241･641,SU-241･641) :−65 to +155℃ (SH-261･661,SU-261･661) Humid : 0 to 100 %rh (SH only) Tim : 0 to 99 hours 59 minutes, 100 to 999 hours
Setting and indication resolution	Temp : 0.1℃ Humid : 1%rh (SH only) Time : 1 minute (in one hour unit for over 100 hours)
Indication accuracy *	Temp : 0.5℃ (Typ.) Humid : ±2%rh (Typ.) (SH only) Time : within 30 sec. per month
Input	Thermocouple type T (Copper/ Copper-Nickel)
Control	PID control
Communication function	RS-485
Auxiliary functions	Input burn-out detection function Upper and lower temperature (& humidity) limit alarm function Self-diagnostic function (watchdog timer) Alarm indication function Power failure protection function Timer function (automatic start/stop) Refrigerator capacity automatic control function
Battery	Lithium battery, 1

* At +23℃ ±5℃ ambient temperature

SAFETY DEVICES

- Leakage breaker for power supply
- Thermal fuse
- Boil dry protector (SH only)
- Short circuit protection fuse for control circuit
- Overheat protector
- Overcool protector
- Air circulator temperature switch
- Specimen power supply control terminals
- Refrigerator overload relay
- Inside chamber door switch
- Upper and lower temperature & humidity limit alarms
  (built inside temperature & humidity controller)
- Burn-out detection function
  (built inside temperature & humidity controller)
- Watchdog timer
  (built inside tem-perature & humidity controller)
- Refrigerator automatic delay circuit
  (built inside temperature & humidity controller)

SHELVES

- Load capacity (uniformly distributed load)
  - SH/ SU-221, 241, 261 ..... 500g
  - SH/ SU-641, 661 ..... 5kg
- Number of shelves
  - SH/ SU-221, 241, 261 ..... 5 (Shelf pitch 35mm)
  - SH/ SU-641, 661 ..... 5 (Shelf pitch 50mm)

ACCESSORIES

- Shelf 1
- Connector
  - 2P for connecting terminal for temp & humid recorder ..... 2 (1 for SU)
  - 6P for connecting signal terminal 1
- Rubber plug for cable port 2
- Glass tube fuse 1
- Adaptor for socket ..... 1 (100VAC, 115V AC only)
  (for SH/ SU-221, 241, 261)
- Wet-bulb wick ..... 1 box (SH only)
- Humidifying tray drain hose 2m ..... 1 (SH only)
- Water level sensor tank drain hose 0.3m ..... 1 (SH only)
- Instruction manual 1
- Warranty 1

DANGER

- Do not use specimens which are explosive or inflammable, or which contain such substances. To do so could be hazardous, as this may lead to fire or explosion.
- Do not place corrosive materials in the chamber. If corrosive substances or humidifying water is used, the life of the unit may be significantly shortened.
- Do not place life forms or substances that exceed allowable heat generation.

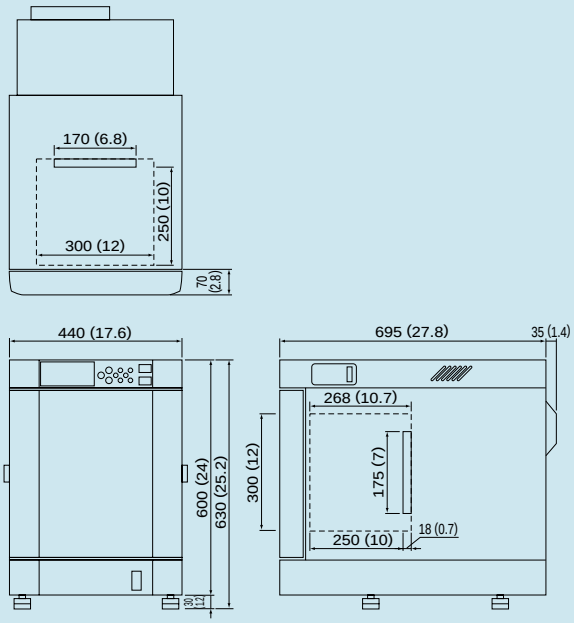
CAUTION

Be sure to read the instruction manual before operation.

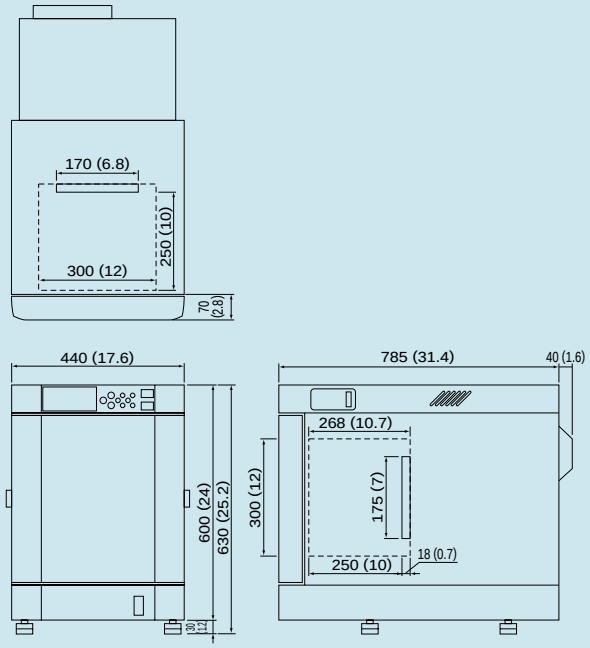
DIMENSIONS

unit : mm (inch)

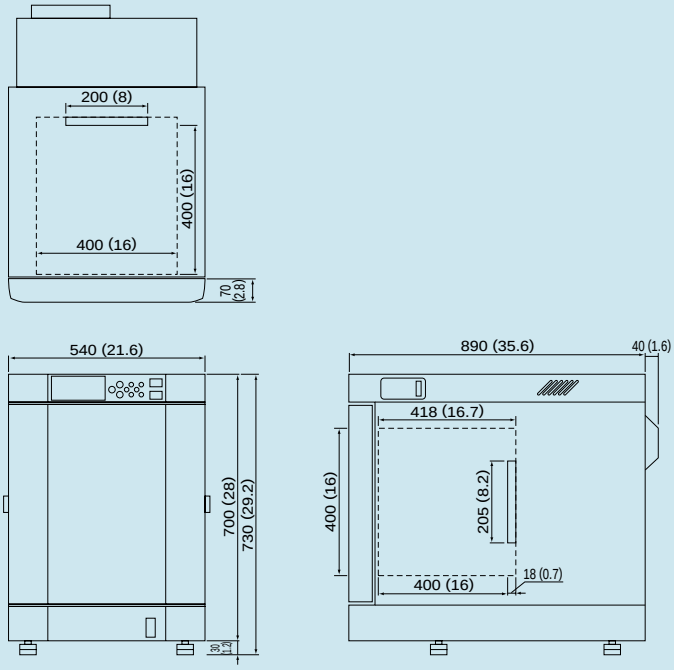
● SH-221·241



● SH-261



● SH-641·661



OPTIONS

Communication functions

Computer interface
- GP-IB
- RS-232C
- E-BUS

*Select one other than standard RS-485.

Communication cable

- RS-485 5, 10m
- GP-IB 2, 4m
- RS-232C 1.5, 3, 5, 10m
  1.5, 3, 5, 10m for extension
- E-BUS 5, 10m

Temperature recorder

SRJ25
- −100 to +200℃
- 100mm
- Portable type
- 6 dots
  (Thermocouple type T (Copper/ Copper-Nickel))
- Digital
- Free power supply (100VAC to 240VAC)

Temperature & humidity recorder

SRJ14 −100 to +150℃/ 0 to 100%rh (for SH)
SRJ12 −50 to +150℃/ 0 to 100%rh (for SH)
- 100mm
- Portable type
- 6 dots
  (Temperature:5 dots thermocouple type T (Copper/ Copper-Nickel)
  Humidity: 1 dot
  DC1 to 5V)
- Digital
- Free power supply (100VAC to 240VAC)

Wet-bulb temperature detecting terminal

Detects wet-bulb temperature inside the chamber. Equal electromotive force as Thermocouple type T (Copper/ Copper-Nickel).
Equipped with connector.

*Not available for SU

Thermocouple

Measures the temperature of specimens
- T (Copper/ Copper-Nickel)
- 2, 4, 6m

Viewing window

A window is installed on chamber door.

SH−221・241・261	W215×H215mm
SU−221・241・261	W215×H215mm
SH−641・661	W215×H315mm
SU−641・661	W215×H315mm

*The basic specification of the chamber will be modified.

Inner door

A glass door is provided inside the chamber door for observation.

* A wiper is equipped for the SH model.

SU model

Right-opening door

Door can be exchanged to a right hinged door.

*Not available with inner glass door option.

Cable port

Additional cable ports are provided on the wall of chamber.
- 25, 50, 100mm diameter
- Flat cable port

*One silicon sponge rubber port plug is equipped per one cable port.
* Basic specification of the chamber may not be effective when equipped with a cable port.

25mm diameter type

50, 100mm diameter type

flat type

Cable port rubber plug

The additional silicon sponge rubber port plug .

■Some photographs listed in this catalog contain Japanese display.

OPTIONS

Auxiliary water tank circuit

Automatic water supply circuit is equipped to replenish the standard tank from the auxiliary water tank.

- Supply water quality
  pure water
  (electrical conductivity 0.1~10 μ S/cm)
- Water supply pressure
  4.9~19.6KPa (Gauge)

Auxiliary water tank

Auxiliary tanks are provided to replenish water to the standard tank.

Tray for auxiliary water tank

Protects water from leaking while supplying water from the auxiliary water tank.

Drain tank

Storage tank for drain water with a full indication buzzer.

Stand

This stand enhances mobility of the chamber and ease the work to load/ unload the specimen. Stand for stacking two or three chambers save installation space.

* Be sure to secure the stand onto the floor with earthquake resistant fittings for your safety especially when using stand for two/ three chambers.


for one chamber


for stacking
two chambers


for stacking
three chambers

*Stand for three chambers is designated only for SH-221, 241, SU-221, 241.

Shelf

Auxiliary shelves on request.
SH/ SU-221・241・261

- Effective size 200W × 150Dmm
- Load capacity
  (uniformly distributed load) 500g

SH/ SU-641・661

- Effective size 300W × 300Dmm
- Load capacity
  (uniformly distributed load) 5kg

Specimen basket

- Size 206W × 40H × 156D mm
- Material 18-8 Cr-Ni stainless steel, 5 mesh metal basket

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JAB Certificate Number R001

JAB EMS Accreditation RE 009

051

ISO 9001/JIS Q 9001
Quality Management System Assessed and Registered

ESPEC CORP. has been assessed by and registered in the Quality Management System based on the International Standard ISO 9001:2000 (JIS Q 9001:2000) through the Japanese Standards Association (JSA).

ISO 14001 (JIS Q 14001)
Environmental Management System Assessed and Registere

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