

Temperature & Humidity Chamber



Satisfaction with the requirements of European regulations and guidelines.



Ensuring the reliability of electronic records and signatures to support GMP audit.



Real-time equipment monitoring and control system using mobile app.



Eco-friendly product that has passed environmental impact assessment tests.



Recognized as an excellent design product by the ministry of commerce, industry, and energy.



More precise temperature control through temperature calibration.



Electronic over temperature protection system.



Conventional over temperature protection, a kind of backup device against electronic over temperature protection failure.



Control of temperature / humidity / rpm / time, etc. through dedicated program.



PC communication via RS-232 / RS-485 / USB port.



User safety by blocking potentially harmful UV light.



Indicator to ascertain water level.



Alarm if the water is low level.



It memorizes the state of power failure and operates automatically when power is restored.



2 year warranty free A/S.

General Application

Temperature and humidity chamber: Test for reliability, durability, climatic, freezing resistance, quality assurance, thermal endurance.

Pharmaceuticals stability test chamber: Stability test in accordance with ICH Guideline Q1A (R2) and Q1B (Option 2)

	Description	Temperature Range (°C / °F)	Humidity Range (%RH)	Volume (L / cu ft)	Model	Page
Small type	Tabletop type <ul style="list-style-type: none"> • Compact design Temp. & Humid. chambers • Continuous innovative model 	-40 to 100 / -40 to 212	20 ~ 95	25, 65, 100 / 0.9, 2.3, 3.5	TH3-KE	286
		-20 to 100 / -4 to 212	20 ~ 95	25, 65, 100 / 0.9, 2.3, 3.5	TH3-ME	286
		0 to 100 / 32 to 212	30 ~ 95	25, 65, 100 / 0.9, 2.3, 3.5	TH3-PE	286
Medium-large size type	Ultra-low temperature type (-70°C) <ul style="list-style-type: none"> • Wide control range for temperature and humidity • Differentiated structural mechanisms 	-70 to 100 / -94 to 212	25 ~ 95	189, 302, 408 / 6.7, 10.7, 14.4	TH-KH	290
	Low temperature type (-40°C) <ul style="list-style-type: none"> • Proven reliability and reproducibility • Optimized control system 	-40 to 100 / -40 to 212	25 ~ 95	189, 302, 408, 800, 1000, 1450 / 6.7, 10.7, 14.4, 28.3, 35.3, 57.1	TH-G	290
	General type <ul style="list-style-type: none"> • Stable temperature and humidity control for even during long-term continuous use 	-5 to 100 / 23 to 212	10 ~ 95 25 ~ 95	180, 314, 419, 770, 997, 1540 / 6.4, 11.1, 14.8, 27.2, 35.2, 54.4	TH-TG	295
	Dual chamber <ul style="list-style-type: none"> • Space-efficient with two chambers. • Independent temperature and humidity control of each chamber 	-5 to 100 / 23 to 212	20 ~ 90	150, 288, 384 (x 2 chamber) / 5.3, 10.2, 13.6 (x 2 chamber)	TH3-DG	299
	Basic type <ul style="list-style-type: none"> • Dedicated controller with enhanced convenience • Improved water supply lines 	0 to 90 / 32 to 194	35 ~ 85	201, 398 / 7.1, 14.1	TH3-E	302
	Pharmaceuticals stability test <ul style="list-style-type: none"> • ICH Q1A (R2), Q1B (Option 2) • Dedicated lamp control system 	-5 to 85 / 23 to 185	20 ~ 85	300, 760 / 10.6, 26.8	TH-ICH	305
Room chamber type	Walk-in <ul style="list-style-type: none"> • Optimized temperature and humidity distribution with large room size walk-in chamber • Easy to use by optimizing the position of the control part according to the installation space and user requirements 					310
Custom type	Customized <ul style="list-style-type: none"> • Design and manufacture the customized Temp. & Humid. Chamber optimized by user requirements • Optimal customized equipment provided based on advanced technology and accumulated experience 					311

※ The contents of the above and the contents of this catalog may differ depending on the specific model and conditions of use. For the information about the features and specifications that applying to each models, please check the information on the corresponding page of each models.

Temperature & Humidity Chamber



Temperature & Humidity Chamber

Proven reliability and reproducibility Continuous innovative model

> Stable temperature and humidity distribution

Specialized internal circulation for fan/motor system structure.
Provides proven reproducibility and high reliability.

> Innovative external humidifier

Stable humidity control and maintains internal cleanliness with differentiated external humidification system.

> Complete chamber structure

Includes double-packing door.
Stable temperature control with excellent insulation and sealing.

> Minimal water consumption

Minimized refilling of water even for long-term high-humidity tests.
Efficient water supply and recirculation system.

Powerful & Useful Control Optimized precision control

> Intuitive operation with color touch display

Easy to understand operation of equipment and operation status with 5.6 inch color touch display controller.

> Powerful program operation

Provides diverse program operation environment with a maximum of 100 patterns and 2000 segments.

> Sophisticated custom control

PID zone subdivided into 6 zones for more precise control stability.

> Multi-functional dedicated software

Up to 32 devices can be controlled at same time.
Device operation and data processing function supported.



Ease of check the test status with LED display showing the operation condition.



Electronic over temperature shutdown system.



Controller for temperature and humidity control. (TH3-model)



Maximized usability with simple and useful functions

> Ease of check the test status

Convenient internal observation with LED lamp and looking glass window.
Figures out the operation state through displaying LED color even a long distance.

> Door lock with key lock

Door structure having well-sealed.
Included key lock features as standard.

> Provision of remote equipment monitoring service (TH3, Option)

Real-time monitoring of equipment operation status using smartphone.
(when purchased LC GreenBox)

> Convenient moving and installation

Easy to move and install with casters.

More convenient and safe structure applied the highest grade safety system

> Electronic over temperature shutdown system

Independent precision temperature sensor and controller.
Provides more secure and reliable over temperature shutdown.

> General over temperature shutdown system

Backup device for electronic system failure.
Implementation of over-temperature shutdown even for electronic errors.

> Self-protection system

Protection system as like water tank shortage, door open warning, etc.
Over-current and short circuit breaking device.

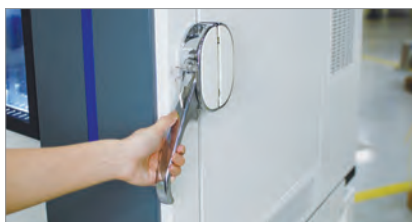
> Protection features for refrigeration system

Protection system for overload and over temperature on refrigerator.
Stops automatically in case refrigerant pressure (high/low pressure) is abnormal.

※ Some of the above contents are limited to specific models.



Tempered glass window with wire heater and LED lamp.



Door handle and locking device.



Ø50mm cable port and silicone plug included as standard.

Temperature & Humidity Chamber

Tabletop type

More convenience small type Temp. & Humid chamber with new advanced controller

Introduction video for TH chamber Tabletop type



TH3-ME

with Wire Shelves 2ea, Φ 50 Cable Port (standard), Stand (option)



Optimized Model Configuration

- 3 series (KE, ME, PE) according to temperature and humidity control range.
TH3-KE; -40 to 100°C (20~95%RH)
TH3-ME; -20 to 100°C (20~95%RH)
TH3-PE; 0 to 100°C (30~95%RH)
- Standard type of Temp. & Humid. Chamber to select the optimized model according to test conditions.
- Dedicated stand for convenient use and moving. (option)
- Recorder for maintaining test records. (option)

Structural Functional Features

- Proven reproducibility and reliability with structural design optimized for miniaturization.
- Compact design minimized foot space for excellent space saving.
- Accessible slim design to laboratories which have only 1-door entry.
- Stable humidity control ability with applying differentiated external humidification system and convenient maintenance for cleaning testing space.
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- The door part has a double sealing structure and excellent airtightness.



Use Convenience Features

- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)
- Convenient operation with 5.6 inch color touch controller.
- Possible to check the operation status with graphs.
- Water level check function enables water replenishment on time.
- Water inlet is easy to use with easy cap.
- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Operation and status monitoring from the front.
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- By displaying the operation status of the device with LED colors, convenient to identify chambers status from a far.
- The cable port and silicone plug included as standard make it convenient to connect external equipment.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.

Multifunction Control System

- Storage and documentation of programs.
- Save program information and back up the set values.
- RS-232 port (default) and RS-485 port (option) supported.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- Reliable control with temperature/humidity auto-tuning and temperature calibration.
- PID zone subdivided into 9 zones for more precise control stability.
- Monitor and control via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Convenient checking with useful graph display.
- Save data as excel and text files.

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.



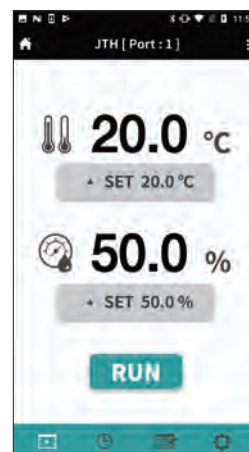
Color touch display controller (5.6 inches)



Indicator LED of operation condition



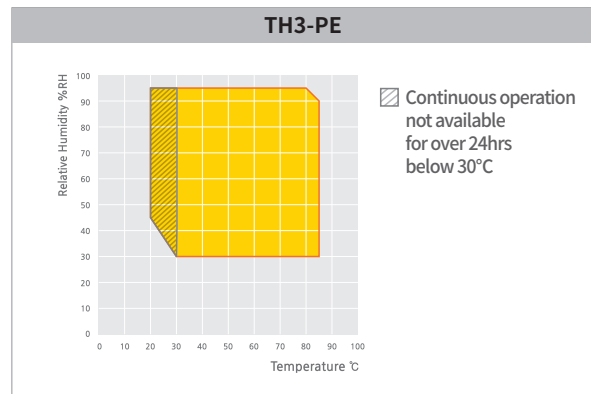
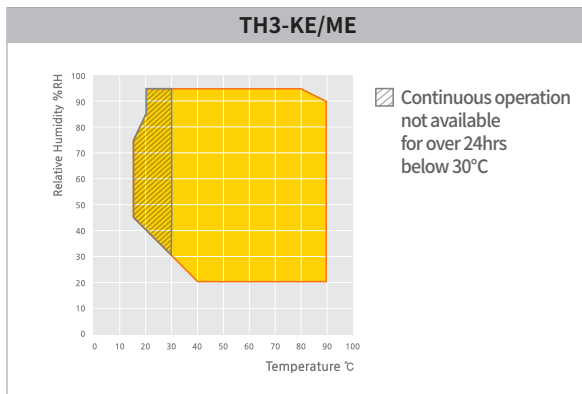
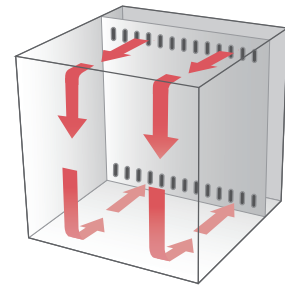
Tempered glass window with wire heater and LED lamp



Remote monitoring and control via LC Connected app

▮ Outstanding Safety

- Electronic over temperature shutdown system.
(advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General over power shutdown system.
(B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.



Specification

Model	TH3-KE-025	TH3-KE-065	TH3-KE-100	TH3-ME-025	TH3-ME-065	TH3-ME-100	TH3-PE-025	TH3-PE-065	TH3-PE-100
Interior dimensions									
Chamber volume (L / cu ft)	25 / 0.9	65 / 2.3	100 / 3.5	25 / 0.9	65 / 2.3	100 / 3.5	25 / 0.9	65 / 2.3	100 / 3.5
Width (mm / inch)	350 / 13.8	400 / 15.7	500 / 19.7	350 / 13.8	400 / 15.7	500 / 19.7	350 / 13.8	400 / 15.7	500 / 19.7
Depth (mm / inch)	220 / 8.7	330 / 13.0	380 / 15.0	220 / 8.7	330 / 13.0	380 / 15.0	220 / 8.7	330 / 13.0	380 / 15.0
Height (mm / inch)	350 / 13.8	495 / 19.5	530 / 20.9	350 / 13.8	495 / 19.5	530 / 20.9	350 / 13.8	495 / 19.5	530 / 20.9
Quantity of shelves (standard/max.)	2 / 7	2 / 10	2 / 10	2 / 7	2 / 10	2 / 10	2 / 7	2 / 10	2 / 10
Distance of between shelves (mm / inch)	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8	20 / 0.8
Max. load per shelf (kg / lbs)	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1	25 / 55.1
Permitted total load (kg / lbs)	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3	65 / 143.3
Cable port (Ø, mm / inch)	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	8 / 0.3	12 / 0.4	12 / 0.4	8 / 0.3	12 / 0.4	12 / 0.4	8 / 0.3	12 / 0.4	12 / 0.4
Weight (kg / lbs)	110 / 242.5	140 / 308.6	150 / 330.7	80 / 176.4	110 / 242.5	130 / 286.6	80 / 176.4	110 / 242.5	130 / 286.6
Temperature data									
Range without humidity (°C / °F)	-35 to 100 / -31 to 212 (50Hz)			-20 to 100 / -4 to 212 (50/60Hz)			0 to 100 / 32 to 212 (50/60Hz)		
	-40 to 100 / -40 to 212 (60Hz)								
Fluctuation (±°C / °F) ¹⁾	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
Variation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Heating time (min) ²⁾	60	60	60	50	50	50	40	40	40
Cooling time (min) ³⁾	70	70	70	55	55	55	35	35	35
Humidity data (※ Ref.: Temp./ Humid. control range graph)									
Range (%RH)	20 to 95	20 to 95	20 to 95	20 to 95	20 to 95	20 to 95	30 to 95	30 to 95	30 to 95
Fluctuation (±%RH) ¹⁾	1	1	1	1	1	1	1	1	1
Variation (±%RH) ¹⁾	3	3	3	3	3	3	3	3	3
Electrical data & Ordering information									
Electrical requirements (AC230V, 1P, 50Hz, A)	12.0	13.9	15.8						
Cat. No.	AAH824132K	AAH824232K	AAH824332K	-	-	-	-	-	-
Cat. No. (EU only)	AAH824135K	AAH824235K	AAH824335K	-	-	-	-	-	-
Electrical requirements (AC230V, 1P, 60Hz, A)	12.0	13.9	15.8						
Cat. No.	AAH824131K	AAH824231K	AAH824331K	-	-	-	-	-	-
Electrical requirements (AC230V, 1P, 50/60Hz, A)				7.7	9.6	13.8	7.2	9.4	10.5
Cat. No.	-	-	-	AAH821132K	AAH821232K	AAH821332K	AAH822132K	AAH822232K	AAH822332K
Cat. No. (EU only)	-	-	-	AAH821135K	AAH821235K	AAH821335K	AAH822135K	AAH822235K	AAH822335K

※ The above specifications are tested according to IEC 60068 standard.

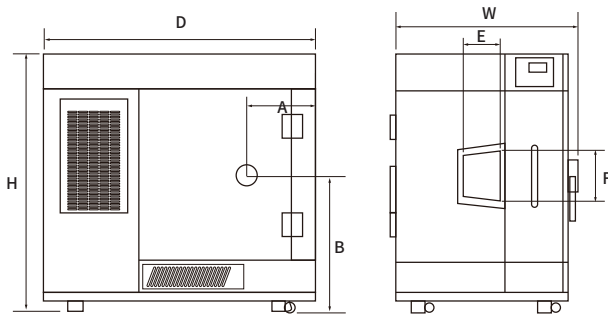
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 25°C, 60%RH.

2) Heating time condition value: TH3-KE (-40°C to 100°C), TH3-ME (-20°C to 100°C), TH3-PE (0°C to 100°C)

3) Cooling time condition value: TH3-KE (20°C to -40°C), TH3-ME (20°C to -20°C), TH3-PE (20°C to 0°C)



Dimension

Model	TH3-KE-025	TH3-KE-065	TH3-KE-100	TH3-ME-025	TH3-ME-065	TH3-ME-100	TH3-PE-025	TH3-PE-065	TH3-PE-100
W (mm / inch)	550 / 21.7	600 / 23.6	700 / 27.6	550 / 21.7	600 / 23.6	700 / 27.6	550 / 21.7	600 / 23.6	700 / 27.6
D (mm / inch)	880 / 34.6	1050 / 41.3	1110 / 43.7	880 / 34.6	1050 / 41.3	1110 / 43.7	880 / 34.6	1050 / 41.3	1110 / 43.7
H (mm / inch)	915 / 36.0	1060 / 41.7	1100 / 43.3	915 / 36.0	1060 / 41.7	1100 / 43.3	915 / 36.0	1060 / 41.7	1100 / 43.3
A (mm / inch)	211 / 8.3	276 / 10.9	276 / 10.9	211 / 8.3	276 / 10.9	276 / 10.9	211 / 8.3	276 / 10.9	276 / 10.9
B (mm / inch)	520 / 20.5	580 / 22.8	580 / 22.8	520 / 20.5	580 / 22.8	580 / 22.8	520 / 20.5	580 / 22.8	580 / 22.8
E (mm / inch)	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7	170 / 6.7
F (mm / inch)	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0	229 / 9.0

Accessories Page 308 Cable Port, Shelves, Signal Lamp, Recorder, Water Purifier, Direct Water System, Stand, LC GreenBox, LC DataKeeper

Temperature & Humidity Chamber

Low temperature type (-70 to 100°C / -40 to 100°C)

General Temp. & Humid chamber with proven reliability and reproducibility

- TH-KH Ultralow temp. type (-70°C)
- TH-G Low temp. type (-40°C)



TH-G-180

with Wire Shelves 2ea, Φ 50 Cable Port (standard), Recorder (option)

Optimized Model Configuration

- Various models optimized according to temperature and humidity control range and specialized functions.
- TH-KH Series (-70 to 100°C, 25~95%RH)
Provides wide temperature control range.
- TH-G Series (-40 to 100°C, 25~95%RH)
Representative model with proven reliability.

Structural Functional Features

- Stable humidity control ability with applying differentiated external humidification system and convenient maintenance for cleaning testing space.
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- Proven reproducibility and reliability with structural design optimized for each capacity.
- The door part is a double-sealed structure that provides enhanced airtightness.
- Durability even after long-term repeated use has been verified by satisfying the door load test (SEFA standard).



Use Convenience Features

- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Drawer-type water tank structure makes refill the water easily at the front part.
- Possible structure to refill the water even during operation.
- Direct water supply system. (option)
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- Open/close door with latches on either side.
- Door handle with built-in key lock.
- Cable port (Ø50 mm) is included as standard, making it convenient to connect external equipment.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.



Drawer-type water tank



Door handle and locking device

Multifunction Control System

- 5.7-inch color touch display controller for convenient intuitive operation and checking of operation status.
- Save program information and back up the set values.
- Includes temperature and humidity auto-tuning.
- Highly reliable control through temperature calibration.
- PID zone subdivided into 6 zones for more precise control stability.
- RS-232 port (default) and RS-485 port (option) supported.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- Convenient checking with useful graph display.



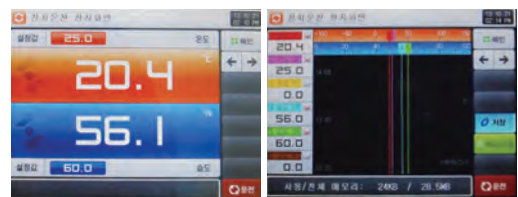
Cable port



Tempered glass window with wire heater and LED lamp

Description	No.
Pattern	120
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	1200
Programmable Process time / segment	999 hr. 59 min.

* It is possible to set 100 segments per pattern, but the maximum number of segments is not 12,000 (120 pattern x 100 segment) but 1,200.

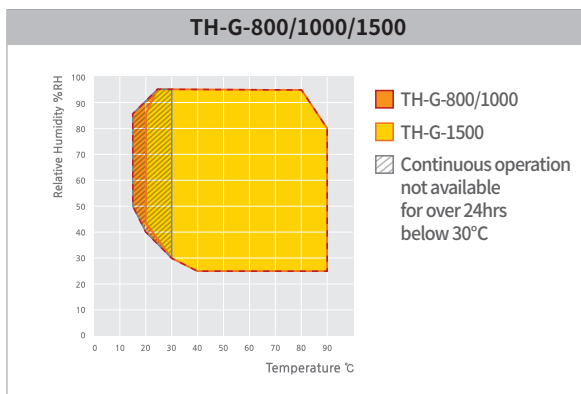
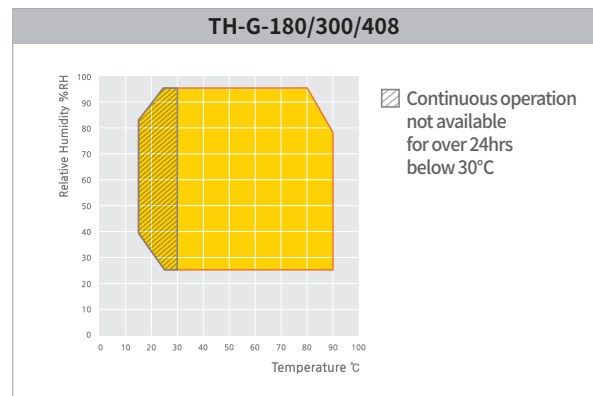
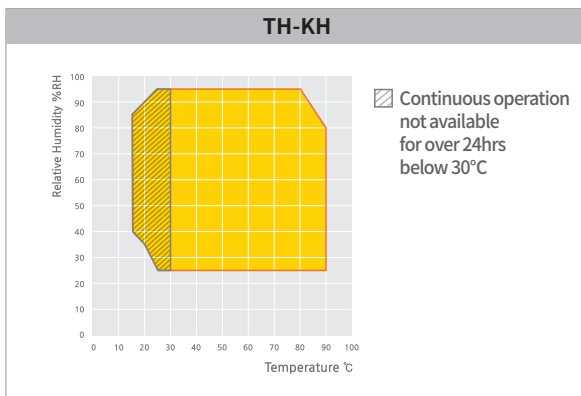
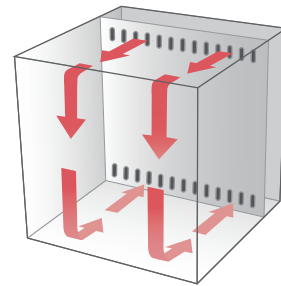


Controller (5.7 inch)

Temp. & humid. graph

▮ Outstanding Safety

- Electronic over temperature shutdown system (advanced over temperature. (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General over power shutdown system. (B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.



Specification

Model	TH-KH-180	TH-KH-300	TH-KH-408
Interior dimensions			
Chamber volume (L / cu ft)	189 / 6.7	302 / 10.7	408 / 14.4
Width (mm / inch)	500 / 19.7	600 / 23.6	600 / 23.6
Depth (mm / inch)	630 / 24.8	630 / 24.8	850 / 33.5
Height (mm / inch)	600 / 23.6	800 / 31.5	800 / 31.5
Quantity of shelves (standard/max.)	2 / 9	2 / 10	2 / 10
Distance of between shelves (mm / inch)	60 / 2.4	60 / 2.4	60 / 2.4
Max. load per shelf (kg / lbs)	20 / 44.1	25 / 55.1	25 / 55.1
Permitted total load (kg / lbs)	50 / 110.2	65 / 143.3	65 / 143.3
Cable port (∅, mm / inch)	50 / 2.0	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	15 / 0.5	15 / 0.5	15 / 0.5
Weight (kg / lbs)	320 / 705.5	385 / 848.8	410 / 903.9
Temperature data			
Range without humidity (°C / °F)	-70 to 100 / -94 to 212	-70 to 100 / -94 to 212	-70 to 100 / -94 to 212
Fluctuation (±°C / °F) ¹⁾	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
Variation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Heating time (-70°C to 100°C) (min)	70	70	70
Cooling time (20°C to -70°C) (min)	80	80	80
Humidity data (※ Ref.: Temp./ Humid. control range graph)			
Range (%RH)	25 to 95	25 to 95	25 to 95
Fluctuation (±%RH) ¹⁾	0.4	0.4	0.4
Variation (±%RH) ¹⁾	3	3	3
Electrical data & Ordering information			
Electrical requirements (380V, 3P, 50Hz, A)	10.1	10.2	10.2
Cat. No.	AAHC3014K	AAHC3114K	AAHC3214K
Cat. No. (EU only)	AAHC3010K	AAHC3110K	AAHC3210K

※ The above specifications are tested according to IEC 60068 standard.

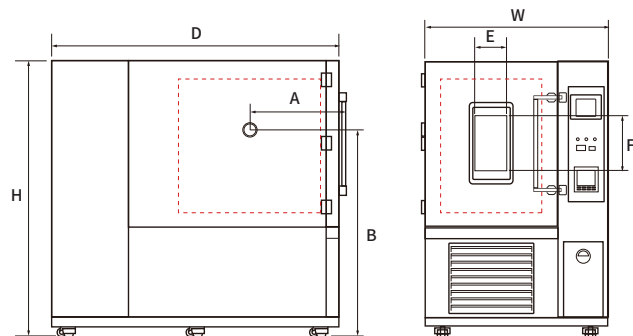
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 25°C, 60%RH.

Dimension

Model	TH-KH-180	TH-KH-300	TH-KH-408
W (mm / inch)	1050 / 41.3	1150 / 45.3	1150 / 45.3
D (mm / inch)	1615 / 63.6	1615 / 63.6	1835 / 72.2
H (mm / inch)	1560 / 61.4	1760 / 69.3	1760 / 69.3
A (mm / inch)	550 / 21.7	550 / 21.7	670 / 26.4
B (mm / inch)	1225 / 48.2	1325 / 52.2	1325 / 52.2
E (mm / inch)	200 / 7.9	200 / 7.9	200 / 7.9
F (mm / inch)	330 / 13.0	330 / 13.0	330 / 13.0



Accessories Page 308 Cable Port, Shelves, Signal Lamp, Recorder, Water Purifier, Direct Water System, Inner Glass Door

Specification

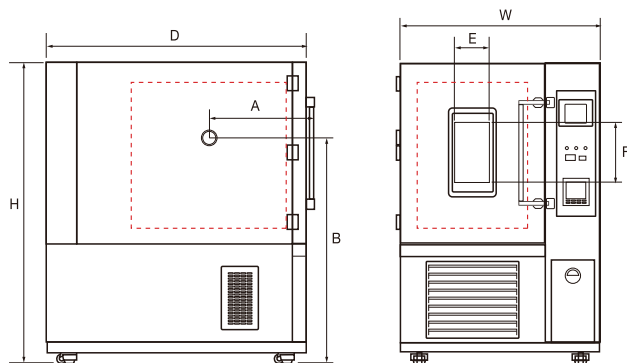
Model	TH-G-180	TH-G-300	TH-G-408	TH-G-800	TH-G-1000	TH-G-1500
Interior dimensions						
Chamber volume (L / cu ft)	189 / 6.7	302 / 10.7	408 / 14.4	800 / 28.3	1000 / 35.3	1450 / 57.1
Width (mm / inch)	500 / 19.7	600 / 23.6	600 / 23.6	1000 / 39.4	1000 / 39.4	1100 / 43.3
Depth (mm / inch)	630 / 24.8	630 / 24.8	850 / 33.5	800 / 31.5	1000 / 39.4	1000 / 39.4
Height (mm / inch)	600 / 23.6	800 / 31.5	800 / 31.5	1000 / 39.4	1000 / 39.4	1450 / 57.1
Quantity of shelves (standard/max.)	2 / 9	2 / 10	2 / 10	2 / 14	2 / 14	3 / 18
Distance of between shelves (mm / inch)	40 / 1.6	40 / 1.6	40 / 1.6	40 / 1.6	40 / 1.6	40 / 1.6
Max. load per shelf (kg / lbs)	20 / 44.1	25 / 55.1	25 / 55.1	40 / 88.2	40 / 88.2	40 / 88.2
Permitted total load (kg / lbs)	50 / 110.2	65 / 143.3	65 / 143.3	100 / 220.5	100 / 220.5	100 / 220.5
Cable port (Ø, mm / inch)	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5
Weight (kg / lbs)	320 / 705.5	385 / 848.8	410 / 903.9	620 / 1366.9	680 / 1499.1	860 / 1896.0
Temperature data						
Range without humidity (°C / °F)	-40 to 100 / -40 to 212 (60Hz) -35 to 100 / -31 to 212 (50Hz)					
Fluctuation (±°C / °F) ¹⁾	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
Variation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Heating time (-40°C to 100°C) (min)	60	60	60	70	70	90
Cooling time (20°C to -40°C) (min)	60	60	60	75	75	90
Humidity data (※ Ref.: Temp./ Humid. control range graph)						
Range (%RH)	25 to 95	25 to 95	25 to 95	25 to 95	25 to 95	25 to 95
Fluctuation (±%RH) ¹⁾	0.4	0.4	0.4	1	1	2
Variation (±%RH) ¹⁾	3	3	3	3	3	3
Electrical data & Ordering information						
Electrical requirements (230V, 1P, 50Hz, A)	25.2	25.6	25.6			
Cat. No.	AAH80013K	AAH80023K	AAH80033K	-	-	-
Cat. No. (EU only)	AAH80015K	AAH80025K	AAH80035K	-	-	-
Electrical requirements (230V, 1P, 60Hz, A)	25.2	25.6	25.6			
Cat. No.	AAH80011K	AAH80021K	AAH80031K	-	-	-
Electrical requirements (380V, 3P, 50/60Hz, A)	9.1	9.2	9.2	12.2	12.2	15.5
Cat. No.	AAH80018K	AAH80028K	AAH80038K	AAH80048K	AAH80058K	AAH80078K
Cat. No. (EU only)	AAH80010K	AAH80020K	AAH80030K	AAH80040K	AAH80050K	AAH80070K

※ The above specifications are tested according to IEC 60068 standard.

※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 40°C, 75%RH.



Dimension

Model	TH-G-180	TH-G-300	TH-G-408	TH-G-800	TH-G-1000	TH-G-1500
W (mm / inch)	1003 / 39.5	1103 / 43.4	1103 / 43.4	1503 / 59.2	1503 / 59.2	1503 / 59.2
D (mm / inch)	1139 / 44.8	1139 / 44.8	1359 / 53.5	1319 / 51.9	1519 / 59.8	2065 / 81.3
H (mm / inch)	1468 / 57.8	1668 / 65.7	1668 / 65.7	1968 / 77.5	1968 / 77.5	2007 / 79.0
A (mm / inch)	412 / 16.2	432 / 17.0	532 / 20.9	509 / 20.0	609 / 24.0	482 / 19.0
B (mm / inch)	1110 / 43.7	1246 / 49.1	1246 / 49.1	1465 / 57.7	1495 / 58.9	1500 / 59.1
E (mm / inch)	200 / 7.9	200 / 7.9	200 / 7.9	270 / 10.6	270 / 10.6	270 / 10.6
F (mm / inch)	330 / 13.0	330 / 13.0	330 / 13.0	330 / 13.0	330 / 13.0	330 / 13.0

Temperature & Humidity Chamber

General type (-5 to 100°C)

Stable control for long-term temperature and humidity tests



TH-TG-180

with Wire Shelves 2ea, Φ 50 Cable Port (standard), Recorder (option)



TH-TG-1500

with Wire Shelves 2ea, Φ 50 Cable Port (standard), Recorder, Signal Lamp (option)

Optimized For Long-term Testing

- Superior defrosting control technology ensures stable temperature and humidity control for long-term tests.
- Recommended in case no low temperature testing.
- 6 models up to 1500L depending on capacity.
- Satisfies ICH Guideline Q1A (R2) Stability Test.
- Recorder for maintaining test records. (option)
- Options available for convenient internal observation during long-term testing and access to samples under testing. (inner glass door and hand-in port)

Structural Functional Features

- Optimum temperature and humidity test can be carried out even with minimum refrigeration performance, it makes reduce the electric energy efficiently.
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- Proven reproducibility and reliability with structural design optimized for each capacity.
- The door part is a double-sealed structure that provides enhanced airtightness.

Use Convenience Features

- Convenient operation with large color touch display controller.
- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Drawer-type water tank structure makes refill the water easily at the front part.
- Possible structure to refill the water even during operation.
- Convenient checking the water level at the front of the chamber.
- Direct water supply system. (option)
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- Open/close door with latches on either side.
- Door handle with built-in key lock.
- Cable port (Ø50 mm) is included as standard, making it convenient to connect external equipment.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.



Drawer-type water tank



Door handle and locking device

Multifunction Control System

- Save program information and back up the set values.
- Includes temperature and humidity auto-tuning.
- Highly reliable control through temperature calibration.
- PID zone subdivided into 9 zones for more precise control stability.
- RS-232 port (default) and RS-485 port (option) supported.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- Convenient checking with useful graph display.



Cable port



Tempered glass window with wire heater and LED lamp

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.

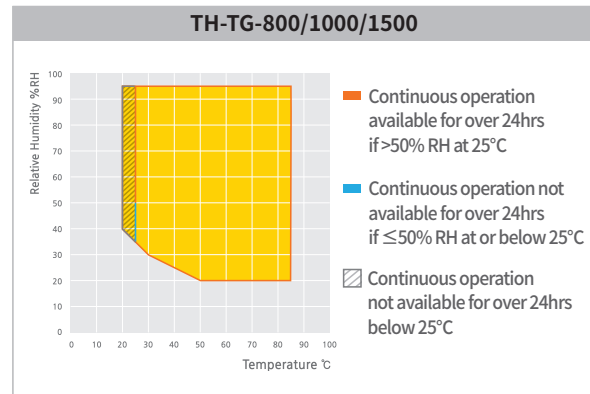
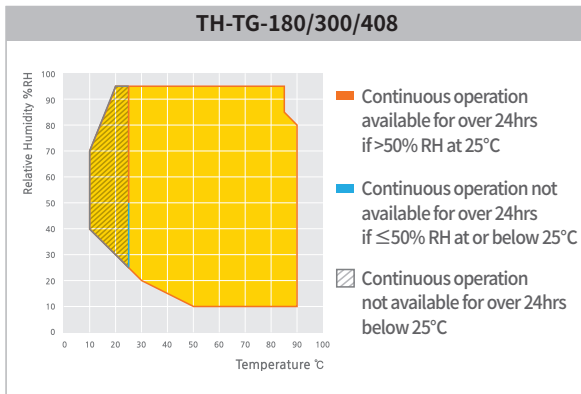
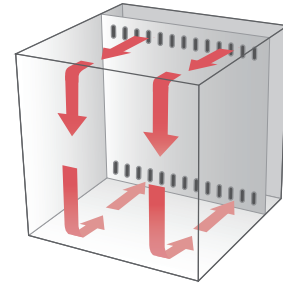


Controller



Outstanding Safety

- Electronic over temperature shutdown system (advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General-type over power shutdown system. (B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.



Specification

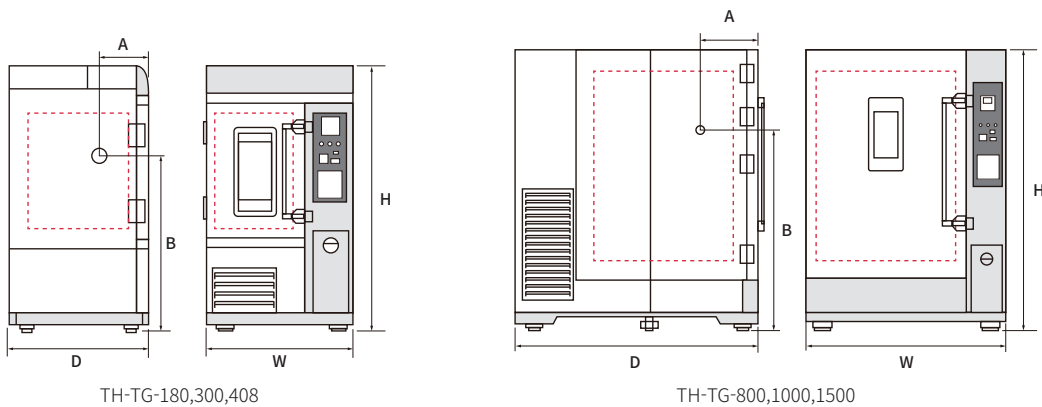
Model	TH-TG-180	TH-TG-300	TH-TG-408	TH-TG-800	TH-TG-1000	TH-TG-1500
Interior dimensions						
Chamber volume (L / cu ft)	180 / 6.4	314 / 11.1	419 / 14.8	770 / 27.2	997 / 35.2	1540 / 54.4
Width (mm / inch)	500 / 19.7	748 / 29.4	748 / 29.4	748 / 29.4	748 / 29.4	1100 / 43.3
Depth (mm / inch)	600 / 23.6	600 / 23.6	800 / 31.5	920 / 36.2	1190 / 46.9	1000 / 39.4
Height (mm / inch)	600 / 23.6	700 / 27.6	700 / 27.6	1120 / 44.1	1120 / 44.1	1400 / 55.1
Quantity of shelves (standard/max.)	2 / 7	2 / 8	2 / 8	2 / 17	2 / 17	2 / 17
Distance of between shelves (mm / inch)	60 / 2.4	60 / 2.4	60 / 2.4	60 / 2.4	60 / 2.4	60 / 2.4
Max. load per shelf (kg / lbs)	20 / 44.1	25 / 55.1	25 / 55.1	40 / 88.2	40 / 88.2	40 / 88.2
Permitted total load (kg / lbs)	50 / 110.2	65 / 143.3	65 / 143.3	100 / 220.5	100 / 220.5	100 / 220.5
Cable port (Ø, mm / inch)	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5	15 / 0.5
Weight (kg / lbs)	220 / 485.0	250 / 551.2	280 / 617.3	360 / 793.7	410 / 903.9	480 / 1058.2
Temperature data						
Range without humidity (°C / °F)	-5 to 100 /23 to 212	-5 to 100 /23 to 212	-5 to 100 /23 to 212	-5 to 100 /23 to 212	-5 to 100 /23 to 212	-5 to 100 /23 to 212
Fluctuation (±°C / °F) ¹⁾	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
Variation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Heating time (-5°C to 100°C) (min)	50	50	50	55	55	55
Cooling time (100°C to -5°C) (min)	120	120	120	145	145	145
Humidity data (※ Ref.: Temp./ Humid. control range graph)						
Range (%RH)	10 to 95	10 to 95	10 to 95	25 to 95	25 to 95	25 to 95
Fluctuation (±%RH) ¹⁾	2	2	2	2	2	2
Variation (±%RH) ¹⁾	3	3	3	3	3	3
Electrical data & Ordering information						
Electrical requirements (230V, 1P, 50/60Hz, A)	11.8	13.9	13.9	14.9	14.9	24.0
Cat. No.	AAHC2002K	AAHC2012K	AAHC2022K	AAHC2032K	AAHC2042K	AAHC2052K
Cat. No. (EU only)	AAHC2005K	AAHC2015K	AAHC2025K	AAHC2035K	AAHC2045K	AAHC2055K

※ The above specifications are tested according to IEC 60068 standard.

※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 40°C, 60%RH.



Dimension

Model	TH-TG-180	TH-TG-300	TH-TG-408	TH-TG-800	TH-TG-1000	TH-TG-1500
W (mm / inch)	952 / 37.5	1201 / 47.3	1201 / 47.3	1201 / 47.3	1201 / 47.3	1554 / 61.2
D (mm / inch)	907 / 35.7	907 / 35.7	1107 / 43.6	1228 / 48.3	1498 / 59.0	1872 / 73.7
H (mm / inch)	1503 / 59.2	1525 / 60.0	1525 / 60.0	1993 / 78.5	1993 / 78.5	1935 / 76.2
A (mm / inch)	321 / 12.6	366 / 14.4	366 / 14.4	385 / 15.2	520 / 20.5	447 / 17.6
B (mm / inch)	1004 / 39.5	1016 / 40.0	1016 / 40.0	1335 / 52.6	1335 / 52.6	1384 / 54.5

Temperature & Humidity Chamber

Dual type

Space efficiency model that controls two upper and lower chambers individually



TH3-DG-150

with Wire Shelves 2ea Φ 50 Cable Port (standard), Recorder (option)

Optimized For Long-term Testing

- Independent control of the temperature and humidity with dual chambers divided into upper and lower.
- Suitable for use when various test are required.
- Superior defrosting control technology ensures stable temperature and humidity control for long-term tests.
- Recommended in case no low temperature testing.
- Provide 3 kinds of model depending on capacity.
- Satisfies ICH Guideline Q1A (R2) Stability Test.
- Recorder for maintaining test records. (option)

Structural Functional Features

- Optimum temperature and humidity test can be carried out even with minimum refrigeration performance, it makes reduce the electric energy efficiently.
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- Proven reproducibility and reliability with structural design optimized for each capacity.
- The door part is a double-sealed structure that provides enhanced airtightness.

Use Convenience Features

- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)
- Convenient operation with 5.6 inch color touch display controller.
- Possible to check the operation status with graphs.
- Water level check function enables water replenishment at the right time.
- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- By displaying the operation status of the device with LED colors, convenient to identify chambers status from a far.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.



Door handle & locking device



Cable Port

Multifunction Control System

- Storage and documentation of programs.
- Save program information and back up the set values.
- RS-232 port (default) and RS-485 port (option) supported.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- Reliable control with temperature/humidity auto-tuning and temperature calibration.
- PID zone subdivided into 9 zones for more precise control stability.
- Monitor and control via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Convenient checking with useful graph display.
- Save data as excel and text files.

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

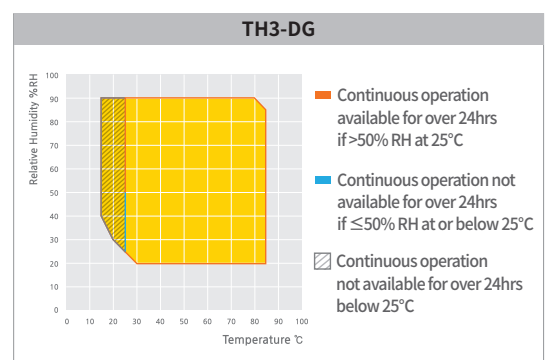
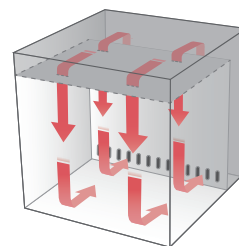
* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.



Controller

Outstanding Safety

- Electronic over temperature shutdown system. (advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General over power shutdown system. (B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.





Specification

Model	TH3-DG-150	TH3-DG-300	TH3-DG-400
Interior dimensions			
Chamber volume (L / cu ft)	150 x 2 / 5.3 x 2	288 x 2 / 10.2 x 2	384 x 2 / 13.6 x 2
Width (mm / inch) ²⁾	600 / 23.6	800 / 31.5	800 / 31.5
Depth (mm / inch) ²⁾	500 / 19.7	600 / 23.6	800 / 31.5
Height (mm / inch) ²⁾	500 / 19.7	600 / 23.6	600 / 23.6
Quantity of shelves (standard/max.) ²⁾	2 / 7	2 / 8	2 / 8
Distance of between shelves (mm / inch)	60 / 2.4	60 / 2.4	60 / 2.4
Max. load per shelf (kg / lbs)	25 / 55.1	25 / 55.1	25 / 55.1
Permitted total load (kg / lbs) ²⁾	75 / 165.3	75 / 165.3	75 / 165.3
Cable port (∅, mm / inch) ²⁾	50 / 2.0	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	20 / 0.7	20 / 0.7	20 / 0.7
Weight (kg / lbs)	420 / 926	516 / 1137.6	560 / 1234.6
Temperature data			
Range without humidity (°C / °F)	-5 to 100 / 23 to 212	-5 to 100 / 23 to 212	-5 to 100 / 23 to 212
Fluctuation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Gradient (±°C / °F) ¹⁾	< 2.0 / 3.6	< 2.0 / 3.6	< 2.0 / 3.6
Heating time (-5°C to 95°C) (min)	130	120	130
Cooling time (95°C to -5°C) (min)	140	130	140
Humidity data (※ Ref.: Temp./ Humid. control range graph)			
Range (%RH)	20 to 90	20 to 90	20 to 90
Fluctuation (±%RH) ¹⁾	1.5 (2.0 at the point of 24hr)	1.5 (2.0 at the point of 24hr)	1.5 (2.0 at the point of 24hr)
Variation (±%RH) ¹⁾	3	3	3
Electrical data & Ordering information			
Electrical requirements (230V, 1P, 50/60Hz, A)	13.0 x 2ea	16.8 x 2ea	16.8 x 2ea
Cat. No.	AAHC6302K	AAHC6312K	AAHC6322K

※ The above specifications are tested according to IEC 60068 standard.

※ Permissible environmental conditions are 18 - 25°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

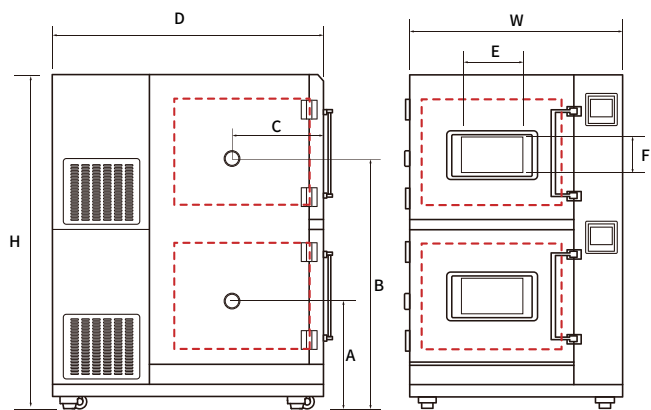
※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20μs/cm.

1) The set value is set under the conditions of 40°C, 75%RH.

2) Each chamber.

Dimension

Model	TH3-DG-150	TH3-DG-300	TH3-DG-400
W (mm / inch)	1055 / 41.5	1255 / 49.4	1255 / 49.4
D (mm / inch)	1320 / 52.0	1470 / 57.9	1670 / 65.9
H (mm / inch)	1725 / 67.9	1925 / 75.8	1925 / 75.8
A (mm / inch)	710 / 28.0	760 / 29.9	760 / 29.9
B (mm / inch)	1450 / 57.1	1600 / 63.0	1600 / 63.0
C (mm / inch)	345 / 13.6	385 / 15.2	485 / 19.1
E (mm / inch)	330 / 13.0	330 / 13.0	330 / 13.0
F (mm / inch)	200 / 7.9	200 / 7.9	200 / 7.9



Humidity & Temperature Chamber

Accessories Page 308

Cable Port, Shelves, Signal Lamp, Recorder, Water Purifier, Direct Water System, Inner Glass Door, LC GreenBox, LC DataKeeper

Temperature & Humidity Chamber

Basic type

Applied the new developed controller specialized for Temp. & Humid chambers

▣ Differentiated Systems

- Convenient operation with 5.6 inch color touch display controller.
- Possible to check the operation status with graphs.
- Minimize the occurrence of faults by simplifying water direct line and electric circuit.
- Water level check function enables water replenishment at the right time.

▣ Structural Functional Features

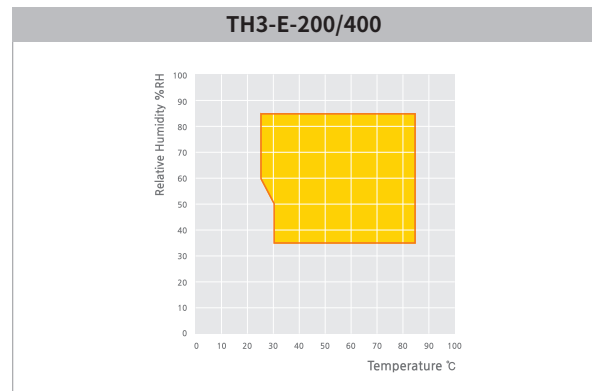
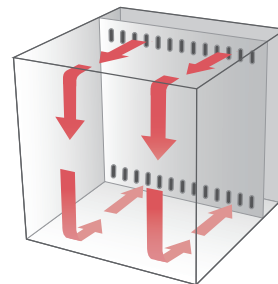
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- The door part is a double-sealed structure that provides enhanced airtightness.
- Maintains stable temperature and humidity by circulating air in the chamber at the optimum speed.
- Energy-saving system that can perform optimum temperature and humidity tests efficiently, reducing power consumption during operation.

▣ Outstanding Safety

- Electronic over temperature shutdown system.
(advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General over power shutdown system.
(B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.



TH3-E-200
with Wire Shelves 2ea (standard)





Use Convenience Features

- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)
- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Direct water supply system. (option)
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- A structure that allows the door to be opened and closed easily.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.

Multifunction Control System

- Reliable control with temperature/humidity auto-tuning and temperature calibration.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- PID zone subdivided into 9 zones for more precise control stability.
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Convenient checking with useful graph display.

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

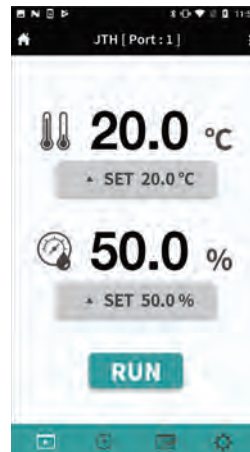
* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.



Large LCD touch screen controller (5.6 inches)



Tempered glass window with wire heater and LED lamp



Remote monitoring and control via LC Connected app

Specification

Model	TH3-E-200	TH3-E-400
Interior dimensions		
Chamber volume (L / cu ft)	201 / 7.1	398 / 14.1
Width (mm / inch)	500 / 19.7	600 / 23.6
Depth (mm / inch)	670 / 26.4	830 / 32.7
Height (mm / inch)	600 / 23.6	800 / 31.5
Quantity of shelves (standard/max.)	2 / 9	2 / 10
Distance of between shelves (mm)	40 / 1.6	40 / 1.6
Max. load per shelf (kg / lbs)	20 / 44.1	25 / 55.1
Permitted total load (kg / lbs)	50 / 110.2	65 / 143.3
Cable port (∅, mm / inch)	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	20 / 0.7	20 / 0.7
Weight (kg / lbs)	200 / 440.9	270 / 595.2
Temperature data		
Range without humidity (°C / °F)	0 to 90 / 32 to 194	0 to 90 / 32 to 194
Fluctuation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9
Variation (±°C / °F) ¹⁾	0.8 / 1.44	0.8 / 1.44
Heating time (0°C to 90°C) (min)	80	80
Cooling time (90°C to 0°C) (min)	90	90
Humidity data (※ Ref.: Temp./ Humid. control range graph)		
Range (%RH)	35 to 85	35 to 85
Fluctuation (±%RH) ¹⁾	1	1
Variation (±%RH) ¹⁾	3	3
Electrical data & Ordering information		
Electrical requirements (230V, 1P, 50/60Hz, A)	15	16
Cat. No.	AAH841102K	AAH841112K

※ The above specifications are tested according to IEC 60068 standard.

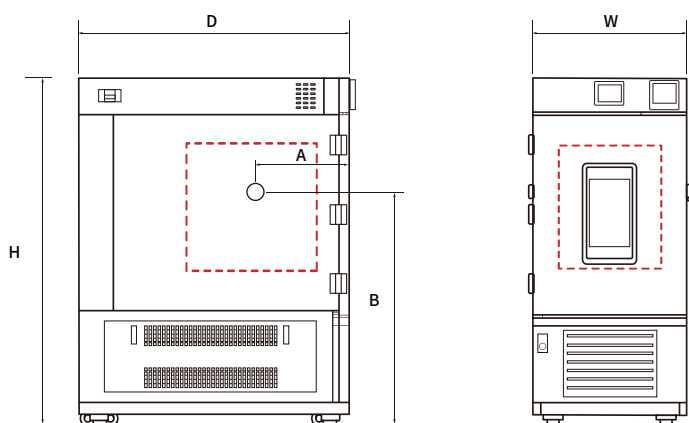
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 40°C, 75%RH.

Dimension

Model	TH3-E-200	TH3-E-400
W (mm / inch)	655 / 25.8	755 / 29.7
H (mm / inch)	1495 / 58.9	1695 / 66.7
D (mm / inch)	1162 / 45.7	1322 / 52.0
A (mm / inch)	375 / 14.8	455 / 17.9
B (mm / inch)	985 / 38.8	1135 / 44.7

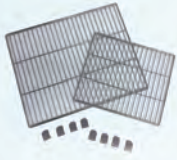


Accessories Page 308

Cable Port, Shelves, Signal Lamp, Recorder, Water Purifier, Direct Water System, Inner Glass Door, LC GreenBox, LC DataKeeper

Accessories

Wire Shelf



- Excellent ventilation structure.
- Stainless steel.
- Includes 2ea as standard.

Perforated Shelf



- Suitable for high-load samples.
- Excellent maintenance as made of stainless steel.

Recorder (Paper)



- Up to 6 channels supported.
- Set recording range and speed.
- Paper width: 100 mm.

Recorder (Digital)



- Paperless. (5.7" LCD display)
- Up to 6 channels supported.
- Data stored in internal/external memory.

Cable Port



- Both cap and silicone plug are included as standard in Ø50 mm cable port.
- It is available to add Ø50 mm, Ø80 mm.

Signal Lamp



- Figuring out equipment status remotely.
- Run/Stand-by/Error displayed by color.

Water Purifier



- Water purifier composed of particle filter and carbon filter.
- Solid steel box construction.

Inner Glass Door



- Minimized temperature and humidity changes and observation of internal samples enabled.
- Hand-in port is provided as standard. (selectable when purchasing)

Stand (1 Stage)



- Dedicated stand for small appliances.
- Provides lower drawer and loading space.
- Casters provided as standard for moving/fixing.

Stand (2 Stage)



- Placing of two compact devices vertically.
- Minimized installation space for different temperature and humidity tests.

Direct Water System



- Direct connection of distilled water to direct water line of the equipment from a water supply pipe.
- Useful for long-term testing.

Model	Cable Port (ø50)	Cable Port (ø80)	Wire Shelf	Perforated Shelf	Signal Lamp	Recorder (Paper)	Recorder (Digital)	Water Purifier	Direct Water System	Inner Glass Door	Stand (1 stage)	Stand (2 stage)
TH3-KE-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-KE-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-KE-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH3-ME-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-ME-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-ME-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH3-PE-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-PE-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-PE-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH-KH-180	AAA8T610	AAA8T6111	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH-KH-300	AAA8T610	AAA8T6111	00EDA0008213	AAA80602-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-KH-408	AAA8T610	AAA8T6111	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-180	AAA8T610	AAA8T611	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH-G-300	AAA8T610	AAA8T611	00EDA0008213	AAA80602-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-408	AAA8T610	AAA8T611	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-800	AAA8T610	AAA8T611	00EDA0008215	AAA80602-4	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81550	N/A	N/A
TH-G-1000	AAA8T610	AAA8T611	00EDA0008216	AAA80602-5	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81550	N/A	N/A
TH-G-1500	AAA8T610	AAA8T611	00EDA0008216	AAA80602-5	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	N/A	N/A	N/A
TH-TG-180	AAA8T610	AAA8T611	00RTD0001302	AAA80604-11	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2501	N/A	N/A
TH-TG-300	AAA8T610	AAA8T611	00RTD0001303	AAA80604-12	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2502	N/A	N/A
TH-TG-408	AAA8T610	AAA8T611	00RTD0001300	AAA80604-13	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2502	N/A	N/A
TH-TG-800	AAA8T610	AAA8T611	00RTD0001304	AAA80604-14	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2503	N/A	N/A
TH-TG-1000	AAA8T610	AAA8T611	00RTD0001301	AAA80604-15	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2503	N/A	N/A
TH-TG-1500	AAA8T610	AAA8T611	00RTD0001305	AAA80604-16	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	N/A	N/A	N/A
TH3-DG-150	AAA8T610	AAA8T611	00EDA0008251	AAAC6501	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6511	N/A	N/A
TH3-DG-300	AAA8T610	AAA8T611	00RTD0001280	AAAC6502	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6512	N/A	N/A
TH3-DG-400	AAA8T610	AAA8T611	00EDA0008250	AAAC6503	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6513	N/A	N/A
TH3-E-200	AAA8T610	AAA8T611	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH3-E-400	AAA8T610	AAA8T611	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-ICH-300	AAA8T610	AAA8T611	00RTD0001196	AAA80604-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81554	N/A	N/A
TH-ICH-800	AAA8T610	AAA8T611	00RTD0001198	AAA80604-4	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81555	N/A	N/A

LC GreenBox (only TH3 models)

- Monitor and control the operation status of the product in real time via mobile app with an internet connection.
- Up to 4 devices can be connected.

Description	Dimension (W x D x H, mm / inch)	Cat. No.
LC GreenBox	156 x 94 x 34 / 6.1 x 3.7 x 1.3	AAHQ1011K



LC DataKeeper (only TH3 models)

- High-integrity software compliant with FDA 21 CFR Part 11
- Integrated with Jeio Tech equipment for GMP audits

Description	Cat. No.
LC DataKeeper-Basic	SSA11001
LC DataKeeper-Pro	SSA11002



※ Trial version is available for 30 days, offering the same features as the Basic version, and can be requested through the website.

Plant Growth Chamber

Provision of optimum photosynthesis conditions for plant growth



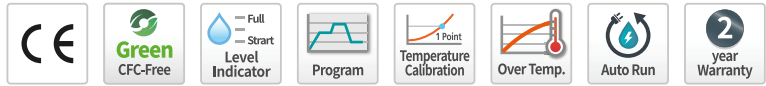
GC-1000TLH



GC-300TLH

Optimal photosynthesis condition for plant growth.

- Uniform temperature and humidity. (TLH models)
- Reinforced Blue and Red spectrums lighting system for plant photosynthesis.
- Optional CO₂ sensor. (option)
- Programmable temperature, humidity, and lighting.
- Progressive temperature, humidity, illumination program control for optimization of plant growth environment for night and day.



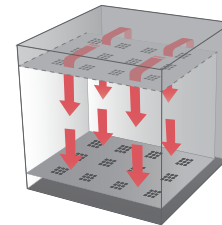
Structural Functional Features

General control system

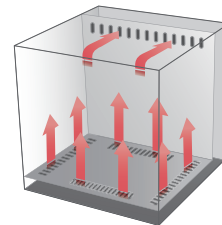
- 5°C to 50°C(lamp off) / 10°C to 50°C. (lamp on)
- Max. to 35,000Lux for GC-1000.
Max. to 20,000Lux for GC-300 Models.
- 40 to 80% RH for GC-300TLH. (at 20 to 35°C)
50 to 90% RH for GC-1000TLH. (at 20 to 35°C)
- Max. 5,000ppm CO₂ on/off system. (option)
- Microprocessor PID control / Temperature calibration / Automatic tuning.
- 10 step programmable temperature, humidity, and illumination profiles and repeatable steps of up to 999 cycles.
- Advanced performance of low and high temperature and humidity control, achieved by adapting the humidification tank exterior to the chamber, added benefit for long term test.

Illuminance control system

- Uniformed luminescence distribution.
- Broad distribution of side lamps for hastening the growth of plants.
- High intensity illumination of upper lamp for light efficient and low thermal load. (for GC-1000TLH/1000TL)
- Unique construction for minimization of heat increase from surrounding lamps.
 - Tempered glass door blocks heated air from lamps.
 - Designed to exhaust heated air through upper vent holes. (for GC-1000TLH)
- Stable and long lasting lighting through introduction of high frequency electronic ballast lamps.



GC-300



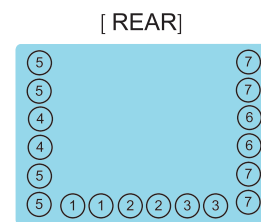
GC-1000

Outstanding Safety

- Automatic shut off after overheat alarm.
- Low and empty water level alarm.
- Power supply leakage breaker.
- Over current protection.
- Open door alarm.

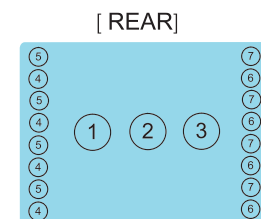
Lamps setting

- Control illumination values with the below lamp setting arrangements.



[FRONT]

GC-300 lamp arrangement

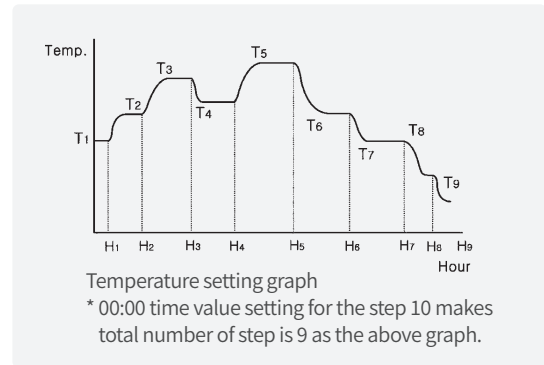


[FRONT]

GC-1000 lamp arrangement

Use Convenience Features

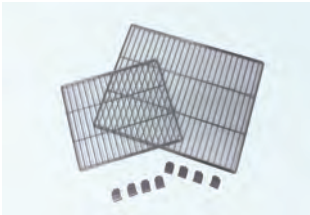
- Ergonomically designed door construction.
 - Inner glass door with silicone and external door with magnetic sealing for dual airtight packing.
 - Well designed providing a smooth open for minimization of damage to plants.
- Wide inner tempered glass door for clear observation of plant growth without affecting inner chamber's environment.
- Tall plants can be grown inside of the chamber with adjustment of shelf level.
- Maintenance of water supply are easily performed with a front water tank. (GC-1000TLH)
 - Water level check indicated by water level bar in the tank.
- Water supply during operation is also available for long term test purposes.
- Adjustable water tank position. (for GC-300TLH)
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency.
 - Maintenance of air filter no longer cumbersome with our detachable condenser air filter.
- Casters for easy mobility during installation or relocation.
- Eco-friendly CFC-free refrigerant use.



Specification

Model		GC-300TL	GC-300TLH	GC-1000TLH
Chamber volume (L / cu ft)		300 / 10.6	300 / 10.6	1000 / 35.3
Temperature	Range (°C / °F)	5 to 50 / 41 to 122 - Lamp off 10 to 50 / 50 to 122 - Lamp on 20 to 50 / 68 to 122 - with humidity		
	Fluctuation at 25°C (±°C / °F)	0.4 / 0.72 - without humidity		
	Variation at 25°C (±°C / °F)	1.0 / 1.8 - without humidity		
Humidity	Range (%RH)	-	40 to 80 at 20 to 35°C 70 to 90 at 36 to 50°C	50 to 90 at 20 to 35°C 60 to 90 at 36 to 50°C
	Fluctuation at 60%RH (±%RH)	-	3	3
Illumination	Range (Lux)	0 to 20000	0 to 20000	0 to 35000
	Control (steps)	10	10	11
	Fluorescent lamp (W)	32 x 18ea	32 x 18ea	32 x 16ea
	Metal lamp (W)	-	-	400 x 3ea
CO₂ (Option)	Range	750 to 5000	750 to 5000	750 to 5000
	Sensor	NDIR CO ₂ sensor	NDIR CO ₂ sensor	NDIR CO ₂ sensor
Dimensions	Interior (W x D x H, mm / inch)	510 x 540 x 1100 / 20 x 21.3 x 43.3	510 x 540 x 1100 / 20 x 21.3 x 43.3	1200 x 800 x 1080 / 47.2 x 31.5 x 42.5
	Exterior (W x D x H, mm / inch)	700 x 805 x 1900 / 27.6 x 31.7 x 74.8	700 x 805 x 1900 / 27.6 x 31.7 x 74.8	1410 x 1070 x 2150 / 55.5 x 42.1 x 84.6
	Net weight (Kg / lbs)	250 / 551.2	250 / 551.2	550 / 1212.5
Electrical requirements (230V, A)		50/60Hz, 12.5	50/60Hz, 16	50Hz, 23.2 60Hz, 30
Cat. No.		AAHA1012K	AAHA1022K	AAHA1032K AAHA1031K

Accessories for Incubator



Wire Shelf
(2 shelves included as standard)

- Stainless Steel
- Uniform temperature distribution based on high air permeability



Perforated Shelf

- Stainless Steel
- Robust structure is ideal for heavy load samples



Recorder (Dot)

- 6-channel graph-type temperature recorder.
- Adjustable recording range, speed, etc.

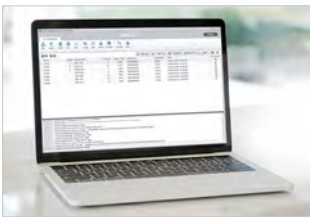


CO₂ Control System

- CO₂ control system for optimal photosynthetic conditions (Sensor, PCB, Valve, etc)

Model	Wire Shelves		Perforated Shelves		Recorder	CO ₂ Control System
	Cat. No.	Quantity of shelves (standard/max.)	Cat. No.	Quantity of shelves (max.)	Cat. No.	Cat. No.
IB4-03	00FDA0009739	2 / 4	AAA125341	4	-	-
IB4-05	00FDA0009738	2 / 5	AAA125342	5	-	-
IB4-10	00FDA0009737	2 / 8	AAA125343	8	-	-
IB4-15	00FDA0009736	2 / 9	AAA125344	9	-	-
IM-10	00EDA0008244	2 / 4	AAA24511	4	-	-
IB-02G-2C/4C ¹⁾	00EDA0008136	2 / 4	AAA12531	4	-	-
ILP-02	00EDA0008223	1 / 6	AAA24501	6	-	-
ILP-12	00EDA0008221	2 / 13	AAA24502	13	-	-
IL3-15/15A	00EDA0008219	2 / 6	AAA22521	6	-	-
IL3-25/25A	00EDA0008220	3 / 13	AAA22522	13	-	-
IL-11-2C/4C ¹⁾	00EDA0008219	2 / 12	AAA12532	12	-	-
GC-300TL	00EDA0008220	3 / 14	AAA22522	14	AAAA1501	AAAA1521
GC-300TLH	00EDA0008220	3 / 14	AAA22522	14	AAAA1501	AAAA1521
GC-1000TLH	00EDA0008222	6 / 29	AAAA1512	29	AAAA1502	AAAA1521

1) Standard for each chamber



LC DataKeeper

- High-integrity software compliant with FDA 21 CFR Part 11
- Integrated with Jeio Tech equipment to undergo GMP audits



LC GreenBox

- Real-time monitoring and control via mobile app
- Connect up to 4 devices to one
- Communication port connectivity via a RS-232 port



BMS Port

- Real-time equipment monitoring from a central monitoring facility
- Useful for safety management at laboratories that operate multiple devices



Stacking Set (-05 / -15 models only)

- Double stackable
- Firm stacking allows efficient utilization of space
(※ When double stacking, the minimum control temperature of the upper chamber may be limited due to the heat generated by the lower chamber)

Model	IB4-03	IB4-05	IB4-10	IB4-15
LC DataKeeper-Basic ¹⁾		SSA11001		
LC DataKeeper-Pro ¹⁾		SSA11002		
LC GreenBox		AAHQ1011K		
BMS Port		AAA125534		
Stacking Set	-	AAA125547	-	AAA125549
Water Tray	AAA125443	AAA125444	AAA125445	AAA124554
Communication Port ²⁾		AAA125533		

1) Trial version is available for 30 days, offering the same features as the Basic version, and can be requested through the website.

2) Communication port is provided as a standard in advanced (-V) model and is an optional add-on for the basic (-S) model for connecting LC DataKeeper, LC GreenBox, BMS, and PC.

Pharmaceutical Stability Test Chamber

Satisfies ICH Guideline Q1A (R2) & Q1B(Option 2) Test

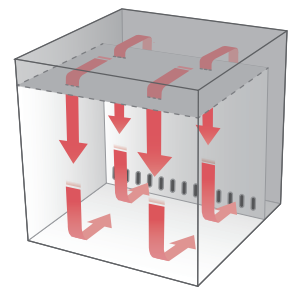
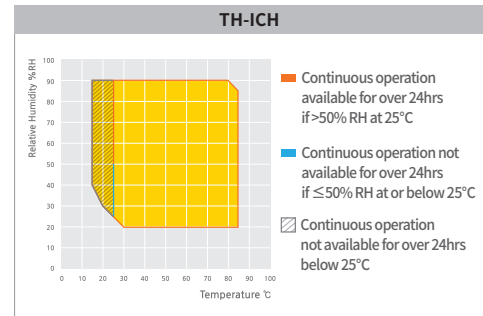


TH-ICH-800

with Wire Shelves 2ea,
Φ50 Cable Port (standard),
Recorder (option)

TH-ICH-300

with Wire Shelves 2ea,
Φ50 Cable Port (standard),
Recorder (option)



▣ Stability Test (ICH Guideline Q1A (R2))

- Ease of data analysis with useful graphical shows.
- Superior defrosting control technology ensures stable temperature and humidity control for long-term tests.
- Drawer-type water tank structure makes refill the water easily at the front part.
- Possible structure to refill the water even during operation.
- Direct water supply system. (option)
- Recorder for maintaining test records. (option)
- Inner glass door allows for convenient internal observation during long-term testing and sample access during testing. (option)

▣ Photostability Test

- Built-in cool white fluorescent lamp and UVA lamp.
- Visible light sensor and UV sensor included as standard.
- Dedicated controller for light cumulative dose setting/control.
- Convenient management by displaying the usage time for each lamp.

▣ Structural Functional Features

- Optimum temperature and humidity test can be carried out even with minimum refrigeration performance, it makes reduce the electric energy efficiently.
- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- Proven reproducibility and reliability with structural design optimized for each capacity.
- The door part is a double-sealed structure that provides enhanced airtightness.

Use Convenience Features

- Convenient operation with 3.7 inch color touch display controller.
- A structure that allows the door to be opened and closed easily.
- Door handle with built-in key lock.
- Cable port (Ø50 mm) is included as standard, making it convenient to connect external equipment.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.



Built-in cool white fluorescent lamp and UVA lamp

Structural Functional Features

- Fix control and program control are selectable.
- Process time displayable.
- Includes temperature and humidity auto-tuning.
- Highly reliable control through temperature calibration.
- PID zone subdivided into 9 zones for more precise control stability.
- RS-232 port (default) and RS-485 port (option) supported.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.



Drawer type of water tank

Outstanding Safety

- Electronic over temperature shutdown system.
(advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General over power shutdown system.
(B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.



UV / VIS sensor



Lamp controller

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.



Controller



Specification

Model	TH-ICH-300	TH-ICH-800
Interior dimensions		
Chamber volume (L / cu ft)	300 / 10.6	760 / 26.8
Width (mm / inch)	750 / 29.5	750 / 29.5
Depth (mm / inch)	650 / 25.6	880 / 34.6
Height (mm / inch)	650 / 25.6	1160 / 45.7
Quantity of shelves (standard/max.)	2 / 8	2 / 17
Distance of between shelves (mm / inch)	60 / 2.4	60 / 2.4
Max. load per shelf (kg / lbs)	25 / 55.1	40 / 88.2
Permitted total load (kg / lbs)	75 / 165.3	100 / 220.5
Cable port (Ø, mm / inch)	50 / 2.0	50 / 2.0
Water tank capacity (L / cu ft)	15 / 0.5	15 / 0.5
Weight (kg / lbs)	280 / 617.3	400 / 881.8
Temperature data		
Range without humidity (°C / °F)	-5 to 85 / 23 to 185	-5 to 85 / 23 to 185
Fluctuation (±°C / °F) ¹⁾	0.3 / 0.54	0.3 / 0.54
Variation (±°C / °F) ¹⁾	0.5 / 0.9	0.7 / 1.26
Heating time (20°C to 85°C) (min)	25	30
Cooling time (20°C to -5°C) (min)	35	40
Humidity data (※ Ref.: Temp./ Humid. control range graph)		
Range (%RH)	20 to 85	20 to 85
Fluctuation (±%RH) ¹⁾	3	3
Variation (±%RH) ¹⁾	5	5
Light data (ICH Q1B option 2)		
Cool white (Lux)	6000	6500
Ultraviolet-A (W/m ²)	4.5	5
Uniformity of Visible light (±%)	10	15
Uniformity of Ultraviolet-A light (±%)	15	15
Typical time 1.2 million Lux-hr (hr)	200	184
Typical time 200 W-hr/m ² (hr)	50	40
Electrical data & Ordering information		
Electrical requirements (230V, 1P, 50/60Hz, A)	14.7	23.5
Cat. No.	AAHC1002K	AAHC1012K
Cat. No. (EU only)	AAHC1005K	AAHC1015K

※ The above specifications are tested according to IEC 60068 standard.

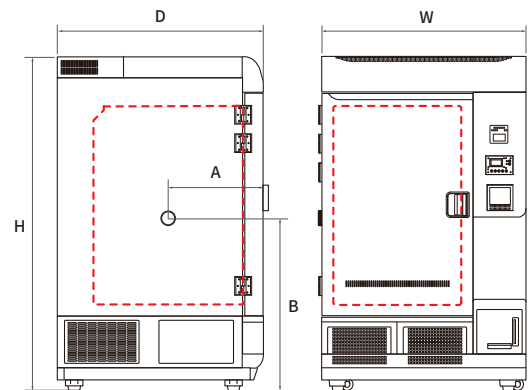
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85%RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 40°C, 60%RH.

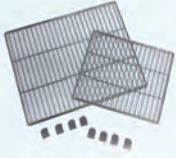
Dimension

Model	TH-ICH-300	TH-ICH-800
W (mm / inch)	1130 / 44.5	1220 / 48.0
D (mm / inch)	985 / 38.8	1215 / 47.8
H (mm / inch)	1520 / 59.8	1955 / 77.0
A (mm / inch)	460 / 18.1	545 / 21.5
B (mm / inch)	905 / 35.6	1185 / 46.7



Accessories

Wire Shelf



- Excellent ventilation structure.
- Stainless steel.
- Includes 2ea as standard.

Perforated Shelf



- Suitable for high-load samples.
- Excellent maintenance as made of stainless steel.

Recorder (Paper)



- Up to 6 channels supported.
- Set recording range and speed.
- Paper width: 100 mm.

Recorder (Digital)



- Paperless. (5.7" LCD display)
- Up to 6 channels supported.
- Data stored in internal/external memory.

Cable Port



- Both cap and silicone plug are included as standard in Ø50 mm cable port.
- It is available to add Ø50 mm, Ø80 mm.

Signal Lamp



- Figuring out equipment status remotely.
- Run/Stand-by/Error displayed by color.

Water Purifier



- Water purifier composed of particle filter and carbon filter.
- Solid steel box construction.

Inner Glass Door



- Minimized temperature and humidity changes and observation of internal samples enabled.
- Hand-in port is provided as standard. (selectable when purchasing)

Stand (1 Stage)



- Dedicated stand for small appliances.
- Provides lower drawer and loading space.
- Casters provided as standard for moving/fixing.

Stand (2 Stage)



- Placing of two compact devices vertically.
- Minimized installation space for different temperature and humidity tests.

Direct Water System



- Direct connection of distilled water to direct water line of the equipment from a water supply pipe.
- Useful for long-term testing.

Model	Cable Port (ø50)	Cable Port (ø80)	Wire Shelf	Perforated Shelf	Signal Lamp	Recorder (Paper)	Recorder (Digital)	Water Purifier	Direct Water System	Inner Glass Door	Stand (1 stage)	Stand (2 stage)
TH3-KE-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-KE-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-KE-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH3-ME-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-ME-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-ME-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH3-PE-025	AAA8T612	N/A	00RTD0000679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80631	AAA80634
TH3-PE-065	AAA8T612	AAA8T611	00RTD0000680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80632	AAA80635
TH3-PE-100	AAA8T612	AAA8T611	00RTD0000681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T625	AAA80620	N/A	AAA80633	N/A
TH-KH-180	AAA8T610	AAA8T6111	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH-KH-300	AAA8T610	AAA8T6111	00EDA0008213	AAA80602-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-KH-408	AAA8T610	AAA8T6111	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-180	AAA8T610	AAA8T611	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH-G-300	AAA8T610	AAA8T611	00EDA0008213	AAA80602-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-408	AAA8T610	AAA8T611	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-G-800	AAA8T610	AAA8T611	00EDA0008215	AAA80602-4	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81550	N/A	N/A
TH-G-1000	AAA8T610	AAA8T611	00EDA0008216	AAA80602-5	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81550	N/A	N/A
TH-G-1500	AAA8T610	AAA8T611	00EDA0008216	AAA80602-5	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	N/A	N/A	N/A
TH-TG-180	AAA8T610	AAA8T611	00RTD0001302	AAA80604-11	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2501	N/A	N/A
TH-TG-300	AAA8T610	AAA8T611	00RTD0001303	AAA80604-12	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2502	N/A	N/A
TH-TG-408	AAA8T610	AAA8T611	00RTD0001300	AAA80604-13	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2502	N/A	N/A
TH-TG-800	AAA8T610	AAA8T611	00RTD0001304	AAA80604-14	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2503	N/A	N/A
TH-TG-1000	AAA8T610	AAA8T611	00RTD0001301	AAA80604-15	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC2503	N/A	N/A
TH-TG-1500	AAA8T610	AAA8T611	00RTD0001305	AAA80604-16	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	N/A	N/A	N/A
TH3-DG-150	AAA8T610	AAA8T611	00EDA0008251	AAAC6501	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6511	N/A	N/A
TH3-DG-300	AAA8T610	AAA8T611	00RTD0001280	AAAC6502	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6512	N/A	N/A
TH3-DG-400	AAA8T610	AAA8T611	00EDA0008250	AAAC6503	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAAC6513	N/A	N/A
TH3-E-200	AAA8T610	AAA8T611	00EDA0008212	AAA80602-1	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81552	N/A	N/A
TH3-E-400	AAA8T610	AAA8T611	00EDA0008214	AAA80602-3	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81551	N/A	N/A
TH-ICH-300	AAA8T610	AAA8T611	00RTD0001196	AAA80604-2	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81554	N/A	N/A
TH-ICH-800	AAA8T610	AAA8T611	00RTD0001198	AAA80604-4	AAA80550	AAA8T500	AAA8T505	AAA8T625	AAA80620	AAA81555	N/A	N/A

LC GreenBox (only TH3 models)

- Monitor and control the operation status of the product in real time via mobile app with an internet connection.
- Up to 4 devices can be connected.

Description	Dimension (W x D x H, mm / inch)	Cat. No.
LC GreenBox	156 x 94 x 34 / 6.1 x 3.7 x 1.3	AAHQ1011K



LC DataKeeper (only TH3 models)

- High-integrity software compliant with FDA 21 CFR Part 11
- Integrated with Jeio Tech equipment for GMP audits

Description	Cat. No.
LC DataKeeper-Basic	SSA11001
LC DataKeeper-Pro	SSA11002



※ Trial version is available for 30 days, offering the same features as the Basic version, and can be requested through the website.