



## Temperature & Humidity Chamber Tabletop type (TH3–ME)

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

### **Features**

#### **Optimized Model Configuration**

- 3 series (KE, ME, PE) according to temperature / temperature and humidity control range.  
TH3-KE; -40 - 150°C  
TH3-ME; -20 - 150°C  
TH3-PE; 0 - 120°C

- Standard type Temp. & Humid chamber for selecting 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 for excellent space saving.
- 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**

- 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.
- 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 of the chamber.
- 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. (mobile monitoring system) (when purchased LC GreenBox)
- Convenient checking with useful graph display.
- Save data as excel and text files.

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

### 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.



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**Color touch display controller**  
(5.6 inches)



**Indicator LED  
of product condition**

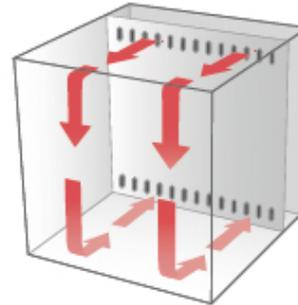
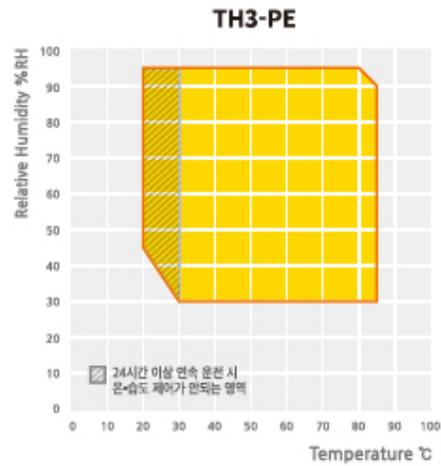
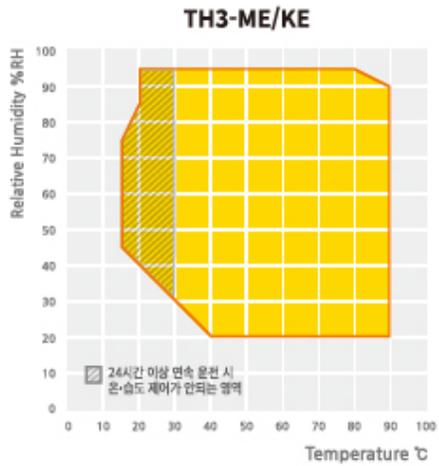


**Tempered glass window  
with wire heater and LED lamp**





Remote monitoring and control via Lab Companion's app



## SPECIFICATIONS

<b>Model</b>	<b>TH3-ME-025</b>	<b>TH3-ME-065</b>	<b>TH3-ME-100</b>
<b>Interior dimensions</b>			
Chamber volume (L / cu ft)	25 / 0.9	65 / 2.3	100 / 3.5
Width (mm / inch)	350 / 13.8	400 / 15.7	500 / 19.7
Depth (mm / inch)	220 / 8.7	330 / 13.0	380 / 15.0
Height (mm / inch)	350 / 13.8	495 / 19.5	530 / 20.9
Quantity of shelves (standard/max.)	2/7	2/10	2/10
Distance of between shelves (mm / inch)	20 / 0.8	20 / 0.8	20 / 0.8
Max. load per shelf (kg / lbs)	25 / 55.1	25 / 55.1	25 / 55.1
Permitted total load (kg / lbs)	65 / 143.3	65 / 143.3	65 / 143.3
Cable port (Ø, mm / inch)	50 / 2.0	50 / 2.0	50 / 2.0

Water tank capacity (L / cu ft)	8 / 0.3	12 / 0.4	12 / 0.4
<b>Weight (kg / lbs)</b>	80 / 176.4	110 / 242.5	130 / 286.6
<b>Temperature data</b>			
Range without humidity (°C / °F)	-20 to 150 / -4 to 302	-20 to 150 / -4 to 302	-20 to 150 / -4 to 302
Fluctuation ( $\pm$ °C / °F) <sup>1)</sup>	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
Variation ( $\pm$ °C / °F) <sup>1)</sup>	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Heating time (0°C to 90°C) (min)	50	50	50
Cooling time (90°C to 0°C) (min)	55	55	55
<b>Humidity data (※ Ref.: Temp./ Humid. control range graph)</b>			
Range (%RH)	20 to 95	20 to 95	20 to 95

Fluctuation ( $\pm^{\circ}\text{C} / ^{\circ}\text{F}$ ) <sup>1)</sup>	1	1	1
Variation ( $\pm^{\circ}\text{C} / ^{\circ}\text{F}$ ) <sup>1)</sup>	3	3	3
<b>Electrical data &amp; Ordering information</b>			
Electrical requirements (AC230V, 1ph, 60Hz)	9.2A	11.1A	13.8A
<b>Cat. No.</b>	<b>AAH821131K</b>	<b>AAH821231K</b>	<b>AAH821331K</b>
Electrical requirements (AC230V, 1ph, 50Hz)	9.2A	11.1A	13.8A
<b>Cat. No.</b>	<b>AAH821132K</b>	<b>AAH821232K</b>	<b>AAH821332K</b>

※ The above specifications are tested according to DIN 12880 and IEC 60068 standards.

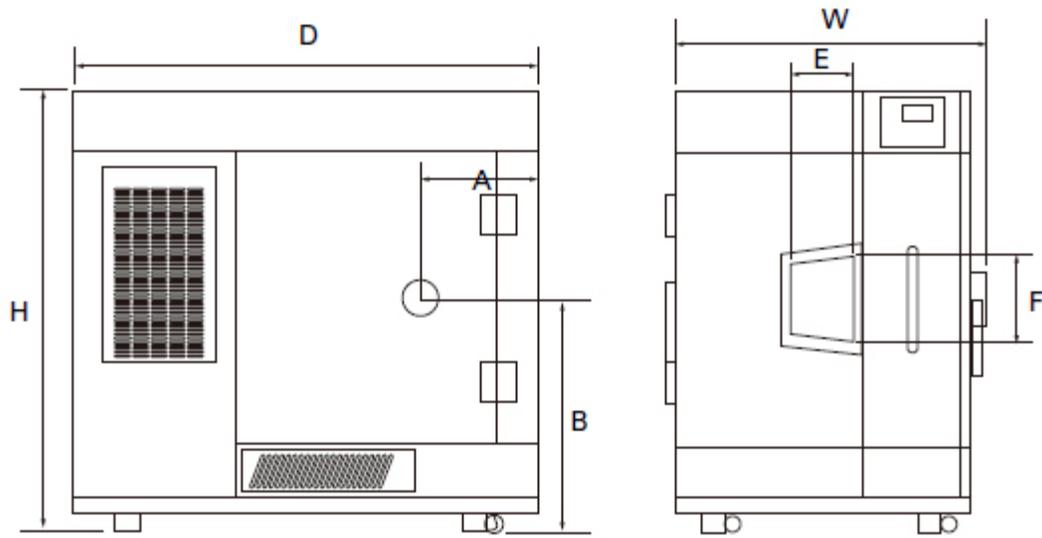
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85% RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20 $\mu\text{S}/\text{cm}$ .

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)



Model	TH3-ME-025	TH3-ME-065	TH3-ME-100
W (mm / inch)	550 / 21.7	600 / 23.6	700 / 27.6
D (mm / inch)	880 / 34.6	1050 / 41.3	1110 / 43.7
H (mm / inch)	915 / 36.0	1060 / 41.7	1100 / 43.3
A (mm / inch)	211 / 8.3	276 / 10.9	276 / 10.9

<b>B (mm / inch)</b>	495 / 19.5	580 / 22.8	580 / 22.8
<b>E (mm / inch)</b>	170 / 6.7	170 / 6.7	170 / 6.7
<b>F (mm / inch)</b>	229 / 9.0	229 / 9.0	229 / 9.0

## 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)



- Up to 6 channels supported.
- Data stored in internal/external memory.

- Paperless. (5.7" LCD display)

#### Cable Port



- It is available to add Ø50 mm, Ø80 mm.

- Both cap and silicone plug are included as standard in Ø50 mm cable port.

#### Signal Lamp



- Run/Stand-by/Error displayed by color.

- Figuring out equipment status remotely.

#### Water Purifier



- Solid steel box construction.

- Water purifier composed of particle filter and carbon filter.

#### Inner Glass Door



- Minimized temperature and humidity changes and observation of internal samples enabled.

- Hand-in port is provided as standard (selectable when purchasing).

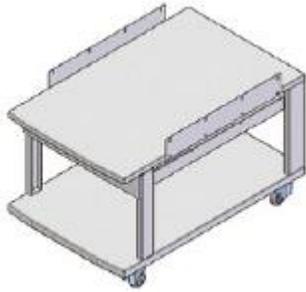
#### Stand (1 Stage)



- 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.

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-ME-025	AAA8T612	N/A	RTD0679	AAA80602-6	AAA80550	AAA8T504	AAA8T506	AAA8T621	AAA80620	N/A	AAA80631	AAA80634
TH3-ME-065	AAA8T612	AAA8T611	RTD0680	AAA80602-7	AAA80550	AAA8T504	AAA8T506	AAA8T621	AAA80620	N/A	AAA80632	AAA80635
TH3-ME-100	AAA8T612	AAA8T611	RTD0681	AAA80602-8	AAA80550	AAA8T504	AAA8T506	AAA8T621	AAA80620	N/A	AAA80633	N/A