

2022 - 2023 Catalog



JEIO TECH is your Lab Companion that provides what you need for your lab. We always think about how we can help researchers to make those successful results.



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#### **Lab Essentials**



Lab Essentials

### Lab Companion, JEIO TECH

Founded in 1988, JEIO TECH, which started from the dream of localizing experimental equipment, has now reached its 34<sup>th</sup> anniversary. Thanks to the support of our customers, we have grown into a leading manufacturer of experimental equipment in Korea that supplies stable experimental equipment all over the world. Main fields are physics and chemistry experimental equipment and reliability testing equipment with technology that allows for excellent control of temperature, humidity, and motion. The company contributes to the entire value chain of laboratory and reliability testing equipment supply, from product development, manufacturing, and sales to validation and after-sales service.



**Sheet Metal Working**Producing a variety of products based on automation equipment.



Precision Machining
Production of precision parts with
state-of-the-art machining



**Powder Painting**Maintaining automated painting facilities and strict quality standards



Assembly Process
Systematic processes such as instruments, electricity, control, and refrigeration



**Total Inspection** 100% inspection of all products produced

< Highly qualified and large capacity factory can offer any product you want at the favorable times >

JEIO TECH has the production facility of about 29,752 m<sup>2</sup> in Korea and meeting its customers worldwide through five domestic and overseas sales offices (including USA). It is striving to become a more reliable research/experimental partner by obtaining product certification such as ISO9001 and ISO13485 quality certification, CE, UL, and CSA. From now on, we will do our best to be loved as a leading Korean company in the world, in the field of research and reliability testing machines.



















< Key certification and memberships >



< Lab Companion worldwide >

#### **Lab Companion**

We are 'Companion in Laboratory' JEIO TECH. We use a brand name 'Lab Companion' embracing the meaning of establishment our company. Lab Companion supplies not only the excellent experimental equipment manufactured by JEIO TECH but also various equipment according to the needs in laboratory at global through cooperation with the other main brand for lab use. Lab companion dreams providing the better the laboratory environment through agonizing and searching for a solution with researchers and experimenters of lab.

Lab Companion - Korea representative brands, we accompany you from purchasing the laboratory equipment to building a good lab.

#### **Customized Products**

We JEIO TECH is representative manufacturer for experimental equipment and reliability testing equipment. We created Special Product division to supply a custom-made equipment which is optimized for the customer own tests. Special Product division consists of technical sales team providing the technical consultant and design manufacturing team presenting the right solutions to the test requirement of users, so they make service more professional. They has delivered successful results to leading international companies such as Samsung SDI, LG Chem and so on. Our Special Product division is a department of JEIO TECH who has the accumulated manufacturing skill over 34 years, we are growing up with our customers.



Temperature test chamber for Fire suppression type



Multi-drawer type oven



Altitude simulation test chamber



Walk-in chamber type temp. & humid. chamber

#### **LC Connected**

#### Real-time moblie control and monitoring system

LC Connected is a system that connects the lab's research device to a single network, allowing the experimenter to operate the device more efficiently. Experimenters can check the condition of their devices anytime, from any location via the mobile app. They can reduce time taken for device managing thanks to check the operation status of registered devices at once, so it makes concentrate on more important works.



LC GreenBox



Lab Companion Mobile App

- Access to the Cloud Server via Wi-Fi or wired LAN.
- Control devices in real time monitoring and two-way communication via Lab Companion mobile application.
- LC GreenBox is available to connect up to 4 devices via RS-232 port.
- Needs to connect PC when sets the network connection at first only.
- \* We will continue to expand Lab Companion equipment with a PC interface. (Supported from Android 6.0 Marshmallow version and above, iOS 12.0 and above.)



Real-time mobile monitoring system



Connection up to 4 devices

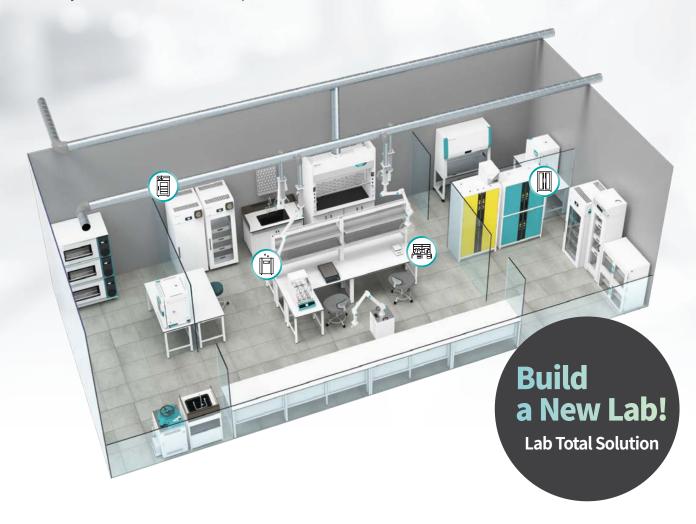


Power failure notification

## **Build a New Lab!**

# Do you need help to set your new lab? or Do you have a plan to move the lab?

JEIO TECH is your Lab Companion that provides what you need for your lab. We always think about how we can help researchers to make those successful results.



#### One stop purchasing

You can find all what you need at once JEIO TECH.



#### **Laboratory Equipment**

Oven & Incubator
Furnace
Shaker & Incubated Shaker
Bath Circulator
Heating Bath
Chiller (Recirculating Cooler)
Stirrer & Mixer
Autoclave





#### **Fume Hood**

Clean Bench
PCR Workstation
UV Sterilization Cabinet
Ductless Fume Hood
Mobile Fume Extractor





#### **Safety Storage & Cabinet**

Fire Safety Storage Cabinet Corrosive Cabinet Filtering Storage Cabinet Gas Cylinder Cabinet Multiple Drawer Cabinet Desiccator



# Laboratory set up and design, from layout drafting to product installation

The laboratory is not enough to be set up by simply placing furniture and equipment in a room, experience and knowledge are required to select the most suitable products for the workflow and experimental conditions along with safety considerations to create the best laboratory environment.

'Lab Companion', JEIO TECH is a company that has over 3 decades of history in the laboratory equipment manufacturing industry with accumulated know-how and delivery performance to provide customers with optimized solutions from selecting the basic equipment, workspaces, laboratory furniture, safety cabinets, etc. to drafting laboratory layouts using specialized software to protect the safety of users and create a pleasant laboratory environment.



















#### **Environmental Test Equipment**

Temp. & Humid. Chamber Heating & Cooling Chamber Heating Chamber



# **Bath Circulator**





### **Refrigerated & Heating Bath Circulator**







#### ( (

#### **Refrigerated & Heating Bath Circulator**

#### **Refrigerated & Heating Bath Circulator**

- Programmable temperature control. LCD color touch screen.

- Various temperature range and capacity.
- $\bullet \ \mathsf{Smart} \ \mathsf{refrigerating} \ \mathsf{system}.$

Working Temp. Range	-35 ~ 150°C -25 ~ 150°C	-35 ~ 150°C -25 ~ 150°C
Temp. Stability at -10°C	± 0.05°C	± 0.05°C
Bath Volume	5L / 10L / 20L / 30L	5L / 10L / 20L / 30L
Model	RW3-P	RW3

#### **Heating Bath Circulator**









#### **Heating Bath Circulator**

Program type

### **Heating Bath Circulator**

General type

- Programmable temperature control.
- LCD color touch screen.

- Suitable for precise temperature testing above ambient temperature.

Working Temp. Range	Amb. +10-150°C	Amb. +10-150°C
Temp. Stability at 50°C	± 0.05°C	± 0.05°C
Bath Volume	5L / 10L / 20L / 30L	5L / 10L / 20L / 30L
Model	CW3-P	CW3

#### Programmable Mode

- · Setting and saving 10 programs.
- · Up to 10 steps can be set per program.
- · Set time up to 99 hours and 59 minutes per step.
- $\cdot$  Program repetition possible up to 99 times.
- $\cdot$  Time set for increasing / decreasing temperature.
- $\cdot \ \mathsf{Pre\text{-}heating} \ \mathsf{possible} \ \mathsf{before} \ \mathsf{starting} \ \mathsf{program}.$
- $\cdot$  Displays and controls the status of the device through the computer interface.



# Chiller (Recirculating Cooler)





#### Ambient temp. type



#### Low temp. type



#### Chiller(Recirculating Cooler)

HX general type

- Representative recirculating cooler suitable for general use.
- Minimized on/off operation of compressor.

#### Chiller (Recirculating Cooler)

HL low-temperature general type

- Recirculating cooler for low temperature range.
- Easy checking the pump status by pump pressure gauge.

Temperature Stability	± 1.0°C	:
Working Temp. Range	+ 3 ~ 40°C	-
Max. Cooling Capacity	8.1 kW at 20°C	-
Pump Capacity	Max. 40L /min. 6 bar	1
Model	HX	ŀ

± 1.0°C
-20 ~ 40°C
7.1kW at 20°C
Max. 70 L/min. 6 bar
HL

#### Low / High temp. precision type



#### **Chiller (Recirculating Cooler)**

HS low-temperature precision type

- Precise temperature control at low temperature range.
- Provide function of control via external temperature sensor.

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#### Chiller (Recirculating Cooler)

HH high-temperature precision type

- Wide temperature range.
- Precise control with +0.1°C stability by PID temperature control.



#### **Chiller (Recirculating Cooler)**

Compact type

- Easy installation and moving with compact design.
- Optimized for use with rotary evaporators.

Temperature Stability	± 0.2°C	± 0.1°C	± 1.0°C
Working Temp. Range	-20 ~ 40°C	-20 ~ 80°C	-10 ~ 30°C
Max. Cooling Capacity	7.1kW at 20°C	6.5kW at 20°C	580W at 20°C
Pump Capacity	Max. 70 L/min. 6 bar	Max. 70 L/min. 6 bar	Max. 26 L/min. 0.7 bar
Model	HS	HH	RC

#### Proven reliability & reproducibility

#### Made and tested according to international standards.

- · Meets safety requirements, including electrical safety standards for chillers. (Recirculating Cooler)
- · Conduction of device performance tests required as per the standards to provide reliable product performance.
- · Verified test results provided as specification to allow for selection of the suitable model for the user.

#### Customized Recirculating Cooler

Customized design, production and installation services with optimized performance for your application.

- · Temperature range and stability.
- · Cooling capacity and heat absorption ability.
- · Pump capacity and configuration in/out.
- · Reasonable convenient safety system.
- · Controller & data processing.

# Heating Bath & Cold Trap Bath



#### **Heating Bath**

Temp. Range Bath Volume Model







### **Heating Bath** General type

- Temperature calibration & timer.

Low water level limiter.
Amb. +7 ~ 100°C
3.5L / 11.5L / 20L
 BW3-G

#### **Heating Bath**

Agitator type

- Circulation of solution by an agitator.
- Independent temperature control for each bath.

· ·
Amb. +5 ~ 100°C
3.5L / 11.5L / 20L
3.5L & 3.5L / 3.5 & 11.5L / 11.5L & 11.5L / 11.5L & 20L
BW-H

#### **Heating Bath**

Economy type

- Economical water bath for easy use.
- Over temperature limiter.

Amb. +7 ~ 100°C
3.5L / 11.5L / 20L
BW-B

#### **Heating Bath, Visible**



#### **Heating Bath, Shaking**



#### **Heating Bath**

Visible type

- Convenient for internal observation.
- Easy to measure viscosity.

Temp. Range	Amb. +5 ~ 150°C	
Bath Volume	25L / 40L	
Model	VB	-
		_

#### **Heating Bath**

Shaking type

- Temperature control and shaking can be set
- Spring wire rack as standard accessory.

Amb. +5 ~ 100°C
17L / 25L / 37L / 55L

### **Cold Trap Bath**



#### **Cold Trap Bath**

- Capture moisture, organic solvents etc. into vacuum pump.
- It can be used in bath that requires low temperature.

Temp. Range	Down to -40°C
Bath Volume	4.8L
Model	CTB-10



Provides optimal choice for diverse experiment needs. Model series according to function classification and usage.

# **Oven & Furnace**





#### **Forced Convection**









#### **Forced Convection Oven**

Program type

- Programmable temperature control.
- LCD color touch screen.

Amb. +10 ~ 250°C

60L / 102L / 151L

OF-P / OF-PW

Temp. Range

Model

Chamber Volume

<b>Forced Convection Oven</b>
General type

- Most representative forced convection type.

- Easy to use with computer connection.

Amb. +10 ~ 250°C

60L / 102L / 151L

OF-G / OF-GW

#### **Forced Convection Oven** Economy type

- Stable product that is faithful to the basics.
- Includes safety device as standard.

Amb. +10 ~ 220°C

52L / 100L / 150L

OF-E

- - Large capacity max. 760L as standard type.
  - Max. 300°C temperature control.

Large type

OF3, OF3-W, P, PW : Amb. +15 ~ 200°C OF3-H, HW, HP, HPW : Amb. +15  $\sim$  300°C

**Forced Convection Oven** 

314L / 450L / 760L

OF3/ OF3-W, P, PW, H, HP, HW, HPW (Large)

#### **Forced Convection**





#### **Natural Convection**





#### **Forced Convection Oven**

2-Chambers type

- · Independent temperature control for each chamber
- · Ventilation hole side of chamber.

#### **Forced Convection Oven**

4-Chambers type

- Space saved chamber.
- Built-in casters for easy moving and

## **Natural Convection Oven**

- Most representative natural convection
- Suitable for drying powder samples.

#### **Natural Convection Oven**

Economy type

- $\bullet$  Stable product that is faithful to the basics
- Includes safety device as standard.

Amb. +15 ~ 220°C	
52L / 100L / 150L	
ON-E	

#### Temp. Range Chamber Volume Model

Amb. +10 ~ 200°C 120L (60L x 2 Chamber) OF-02G-2C

**Hybridization Oven** 

#### Amb. +10 ~ 200°C 240L (60L x 4 Chamber)

Temp. Range

Model

Chamber Volume

OF-02G-4C

52L / 91L/ 135L ON-G / ON-GW

Amb. +15 ~ 250°C

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### **Muffle Furnace**





**Vacuum Oven** 





#### **Hybridization Oven**

- · Rocker inside of chamber.
- · Suitable for hybridization experiments with 10 programs & 10 steps program control.

Туре	Forced Convection
Temp. Range	Amb. +5 ~ 65°C
Chamber Volume	10L
Model	НО
	·

### Vacuum Oven

- NEW
- Product optimized for vacuum oven. • Structure separating vacuum/release
- Available to save the data such as an event log and the setting values on USB.

Amb. +15 ~ 250°C	
28L / 65L	
OV4	

#### Temp. Range Chamber Volume Model

#### **Muffle Furnace**

#### NEW

- Electric furnace for a high temperature experiment of 1100°C.
- Multiple safety devices for user and sample protection.
- Available to save the data such as an event log and the setting values on USB.

Max.1100°C
3.0L / 4.5L / 12.0L
MF2-GF/ MF2-G

# Incubator





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#### **Incubator**











#### Incubator (Air-Jacket)

General type

Amb. +5 ~ 70°C

60L / 102L / 151L

- Versatile air-jacketed natural convection incubators.
- · Glass door for contamination prevention.

Incubator	(Film	Heater)

Economy type

- Stable product that is faithful to the basics.
- Low noise with film heater-type incubator.

71	
Natural Convection	
Amb. +3 ~ 60°C	
65L / 150L / 205L	
IB-E	

#### **Incubator (Forced Convection)**

Mini type

- Compact design.Simple control with touch button.

1
Forced Convection
Amb. +5 ~ 65°C
10L
IM

#### **Incubator**

Type

Temp. Range Chamber Volume



#### **Plant Growth Chamber**



#### Incubator (Forced Convection)

2-chambers type

- 60L capacity for each chamber.
- Independent temperature control for each chamber.

#### Incubator (Forced Convection)

4-chambers type

- Independent temperature control for each chamber.
- Built-in casters for easy moving and installation.

ced Convection	Temp. Range
b. +5 ~ 70°C	Illumination Range
L (60L x 4 Chamber)	Chamber Volume
)2G-4C	Model

#### **Plant Growth Chamber**

- Auto-tuning for temperature/humidity.
- Lighting provided by plant-friendly lamps.

Type
Temp. Range
Chamber Volume
Model

Type

Temp. Range

Chamber Volume Model

Forced Convection
Amb. +5 ~ 70°C
120L (60L x 2)
IB-02G-2C

Fo	rced Convection	Temp. Range
An	nb. +5 ~ 70°C	Illumination Rang
24	0L (60L x 4 Chamber)	Chamber Volume
IB-	-02G-4C	Model

5 ~ 50°C (10~50°C: Lamp on / 20 ~ 50°C: with humidity)	
0 to 20000 lux	0 to 35000 lux
300L / 300L	1000L
GC-300TL/ 300TLH	GC-1000TLH

#### **Low Temperature Incubator**







Low Temperature Incubator



#### **Low Temperature Incubator**

General type

- Provides low temperature culture environment like BOD experiment.
- Internal power outlet included as standard for easy operation of small products.

Forced Convection	Ì
0 ~ 80°C	•
150L / 242L	ĺ
IL3	

#### **Low Temperature Incubator** Air-Jacket type

• Minimizes medium getting dried by

- air-jacket type.
   Prevention of frost by automatic defrosting at all times.
- Na 4 ~

#### • Low temperature control by using electronic cooling element (Peltier Module).

Personal type

Convenient use by minimized	
vibration and power consumption.	
Forced Convection	Fore
10 ~ 40°C (Amb. 25°C)	0 ~

#### **Low Temperature Incubator** Multi type

• 150L capacity for each chamber.

• Independent temperature control for each chamber.

Natural Convection (Air-Jacket)	Forced Convection	Forced Convection	
4 ~ 70°C			
156L / 254L 14L / 48L		300L (150L x 2) / 600L (150L x 4)	
IL3-A ILP IL-11-2C / IL-11-4C		IL-11-2C / IL-11-4C	

# **Incubated Shaker**





#### **Incubated Shaker**







#### **Incubated Shaker**

Tabletop type

- · Optimized for use on bench top.
- · Convenient internal observation.

#### **Incubated Shaker**

Stackable type

- Double-stacked for space saving.
- Includes internal power outlet, and 2ea shelves are provided as standard.

#### **Incubated Shaker**

Floor type

- Strong DD motor for large shaking capacity agitation.
- Large capacity up to 5ea x 6 L flasks at the same time.

Amb. +5 ~ 80°C	R: Amb20 ~ 80°C
30 ~ 300 / 500 rpm	30 ~ 300 / 500 rpm
Orbital	Orbital
~ 39 ea	~ 39 ea
ISF	ISF-R

#### Amb. -15 ~ 80°C Amb. +5 ~ 80°C Temp. Range (min. 15°C) Max. Speed 20 ~ 500 rpm 20 ~ 500 rpm Motion Type Orbital Orbital Max. 250mℓ Flask - 20 ea ~ 20 ea Model IST-R IST

#### Amb. -20 ~ 80°C (min. 4°C) Amb. +5 ~ 80°C 20 ~ 500 rpm 20 ~ 500 rpm Orbital Orbital ~ 24 ea ~ 24 ea ISS ISS-R

#### **Incubated Shaker**







- · Maximum triple-stacked for space saving.
- Strong DD motor for large-capacity.

Temp. Range	Amb. +10 ~ 80°C	Amb20 ~ 80°C (min. 4°C)
Max. Speed	30 ~ 300 / 400 rpm	30 ~ 300 / 400 rpm
Motion Type	Orbital	Orbital
Model	ISS	ISS-R



- Alarm is generated by monitoring difference between actual rpm/ temperature and set rpm/temperature.
- Automatic rpm adjustment when device instability occurs. (high rpm, overload, weight imbalance, etc.)
- Detects abnormal conditions relating to the platform on which the sample is placed and stops the operation. (ISS/IST-3075,4075 model)
- · Automatic restart as it was operated after power recovery.

### Experience reliable precise temperature control up to 80°C.

Advanced temperature control system by Lab Companion's technology.

# Shaker





#### **Open Shaker**









#### Shaker

Dual Action type

- Provides powerful shaking.
- Orbital/Reciprocal motion selection.

#### Shaker General type

- Stable shaking even with high load samples.
- Structure prevents the sample from flowing into inside.

#### Shaker Program type

- Program control mode. • Mounts the large capacity of samples.

#### Shaker Compact type

- Easy to use as a small shaker. · It can be used inside of another chamber. (Amb. 2-60°C)

 Orbital	
50 ~ 300 rpm	Ī

Motion Type
Speed Range
Max. 250mℓ Flask Capacity
Model

Orbital / Reciprocating			
20 ~ 500 rpm			
~8 ea			
OS-2000 OS-3000 OS-4000		OS-4000	

Orbital	
30 ~ 500 rpm	30 ~ 300 rpm
~ 39 ea	~ 39 ea
OS-7100	OS-7200

#### Orbital 30 ~ 500 rpm ~ 51 ea (102 ea when using Dual Platform) SKC

Orbital
50 ~ 300 rpm
~ 9 ea
CMS

#### **Shaker**

Motion Type

Speed Range

Capacity Model









#### Microplate Shaker

Orbital

150 ~ 1200 rpm

Microplate x 4 ea

- Suitable for sample mixing for microplates, tubes etc.
- Tube rack as optional accessory.

#### **Rocking Shaker**

Rocking

CRS

5 ~ 100 rpm 276 x 276 mm

- Easy to adjust angle of motion from
- Up to 99 hours timer function.

#### **Waving Shaker**

- $\bullet$  Easy to adjust angle of motion from 0° to 13°.
- It can be used inside of another chamber. (Amb. 2-60°C)

Waving	
8 ~ 100 rpm	
276 x 276 mm	
CWS	

#### Rotator

- Easily adjustable angle up to 90°.
  Large quantities sample could be mixed at once when loading 2-stage

Rotating
2 ~ 70 rpm
1.5ml Tube x 120 ea (when 2-stage disk loading)
CRT

#### **Funnel Shaker**



#### **Funnel Shaker**

- **NEW**
- Powerful up and down reciprocal motion.
- Adjustable shake tilt (0~20°) to achieve high mixing efficiency at low rpm.
- 4 holders are provided as basic, 10 holders can be mounted in max. (Depends on the funnel size.)

Motion Type	Vertical & Inclined reciprocating (0 ~ 20°)
Speed Range	Vertical 30 to 300rpm / Inclined 30 to 250rpm
Capacity	Separated Funnel 500mℓ x 6 ea in max.
Model	RS-2

#### **Heating Shaker**



#### **Heating Shaker**

- Rapid and accurate control of temperature.
- Optional block according to kinds of sample.

Temp. Range	Amb. +5~100°C
Motion Type	Orbital
Max. Speed Range	150 ~ 1500 rpm
Model	CBS

# Hotplate & Magnetic Stirrer



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#### **Hotplate & Magnetic Stirrer**







#### **Hotplate & Magnetic Stirrer**

Digital type

- Precise temperature control by external temperature sensor.
- Multiple overheating protection devices.

		, 51
Max. Temp. Range		Top Plate, Max. 350°C
Max. Speed Range		30 ~ 2000 rpm
Timer	Heating	0
Time	Stirring	0
Model		TS

#### **Hotplate & Magnetic Stirrer**

Analog type

- Structure prevents the sample from flowing into
- Fast stirring speed control with real time response.

Top Plate, Max. 350°C
Max. 2000 rpm
0
0
TM

#### Hotplate

Digital type

- $\bullet$  Top plate coated with white ceramic for excellent corrosion resistance.
- Warning displayed when top plate is 50°C or more.

Тор	Plate, Max. 3	350°C		
-				
0				
-				
Т				

#### **Magnetic Stirrer**











#### **Magnetic Stirrer**

Digital type

Digital

MS-G

30 ~ 2000 rpm

Maintains accurate speed with reedback control
even when sample viscosity and amount change.
• Timer & Program operation function.

#### **Magnetic Stirrer**

Analog type-Round

Analog

MS-B

150 ~ 2500 rpm

- Quick control of stirring with real time response.
- Provides Silicon-based top plate cover.

<b>Magnetic Stirrer</b>	
Analog type-Triangle	

- Stable structure even with fast stirring.
- Polypropylene (PP) material with excellent chemical resistance.

Analog	
150 ~ 2500 ı	om
-	
MS-T	

## **Multi Position Type**

Control Type

Speed Range

Timer & Program Model





Multi Position type

- 6 models provided with max. 15 positions.
- · 4 kinds of stirring control mode.
- (All, Column, Row, Point)

	( iii) Colairiii) Novi) i Ciril)	
Control Type	Digital	Ì
Temp. Range	-	
Speed Range	30 ~ 2000 rpm	ĺ
Model	MS-M	ĺ



#### **Hotplate & Magnetic Stirrer**

Multi Position type

- 4 kinds of stirring control mode and timer. (All, Column, Row, Point)
- 2 model provided with 9/15 potion.

Digital
Top Plate, Max. 120°C
30 ~ 2000 rpm
MS-MH

#### **Heating Block**



#### **Heating Block**

for Round Bottom Flask & Vial

• Mounted on the hotplate, heating the samples in a round flask or vial safely.

-
Max. 300°C
-
RBP, RBI, VBP, VBI

\* Available volume for flask: 25ml~2L, for vial: 4ml~40ml.

# Overhead Stirrer & Vortex Mixer



#### **Overhead Stirrer**









Prestige touch type

- BLDC motor and color LCD display.
   External controller and PC control for remote operation.

Display	LCD Touch	LCD Touch
Speed Range	50 ~ 1200 rpm	50 ~ 2000 rpm
Viscosity, Max. (cP)	30000 (~1200 rpm) 50000 (~700 rpm)	5000 (~2000 rpm) 50000 (~300 rpm)
Timer	0	0
Best Effort Mode	0	0
Model	MSH-0512	MSH-0520

#### **Specialized external controller**

- Device is controlled conveniently apart from fume hood.
- Checking control status in real time and controls start/stop or stirring speed changes.
- Color LCD touch display for intuitive and easy control.





#### **Overhead Stirrer**







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#### **Overhead Stirrer**

High performance type

- Safety function for over temperature and overload
- protection.
   Convenient use through the computer interface.

Display	Digital
Speed Range	80 ~ 2000 rpm
Viscosity, Max. (cP)	5000 (~2000 rpm) 50000 (~200 rpm)
Timer	-
Best Effort Mode	0
Model	MSD

#### **Overhead Stirrer**

Easy control type

- Easy control model optimized for simple use.
   Safety function for over temperature and overload protection.

Digital
80 ~ 2000 rpm
5000 (~2000 rpm) 50000 (~200 rpm)
-
-

#### **Magnetic Drives**

- Full sealing of reaction container.Cooling line as standard.

isplay	Digital	Digital
oeed Range	80 ~ 2000 rpm	80 ~ 2000 rpm
scosity, Max. (cP)	5000 (~2000 rpm) 50000 (~200 rpm)	5000 (~2000 rpm) 50000 (~200 rpm)
mer	-	-
est Effort Mode	0	-
odel	MSD	MSA

- Max. Torque: 6 kgf.cm Driving Pressure:  $1\times 10^4$ mmHg to  $5\ \text{kg/cm}^2$  Driving Temp. (with Cooling): Max.  $300^\circ\text{C}$

MD

#### **Vortex Mixer**







#### Vortex Mixer

- Convenient use with easily interchangeable accessories.
- Intuitive and convenient operation.

Motion Type	Orbital
Speed Range	Max. 3000 rpm
Operating Mode	Touch, Run
Model	VM-96T

#### **Vortex Mixer**

- Stable motion by its low-profile with small foot print.
- 3 operation mode according to use.

Orbital
Max. 3000 rpm
Touch, Run-L, Run-H
VM-96A

# Life Science Equipment



#### **Heating Block**







#### **Hybridization**





#### **Heating Block**

- Precise temperature control which can be set in units of 0.1°C.
- · Optional block depend on tube size.
- Temp. Range: Amb. + 5 ~ 130°C • Uniformity at 80°C: ± 0.5°C
- Model: CHB-S / CHB-T

#### **Heating & Cooling Block**

- Timer & program operation function.
- · Precise and stable temperature control.
- Temp. Range: Amb. 20 ~ 95°C
- Uniformity at 37°C: ± 0.5°C

Model: CCB

#### **Heating Shaker**

- Rapid and accurate control of temperature.
- · Optional block depend on tube size.
- Temp. Range: Amb. + 5 ~ 100°C
- Orbital Type, Max. 1500 rpm
- Model: CBS

#### **Hybridization Oven**

- Rocker inside of chamber.
- Suitable for hybridization experiments with 10 programs & 10 steps program control.

20ea

- Temp. range: Amb. + 5 ~ 65°C
- Speed range: 5 ~ 50 rpm

Model: HO

#### **Electrophoresis**







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#### A number of upper and lower well for Double-sided Comb of EP

#### **Electrophoresis System**

- Integral structure of transparent polycarbonate material.
- Excellent durability and convenient sample identification.
- Buffer capacity (L): 0.5 / 1 / 1.8

Model: EP

#### **Power Supply**

- Power supply for electrophoresis system.
- 4 of output terminal can be used simultaneously.
- · Exact output by microprocessor.
- Output Range: 5~250V, 0.01~3A, Max. 300W
- Type of output: Constant Voltage, Constant Current

Model: EPS







#### **PCR Workstation**

- High-performance HEPA filter provides a
- Suitable for sensitive experiment like PCR. · Convenient shelf with pipette holder
- 3 model provided according to size. • UV timer function

Model: PW

#### **On-Ice Rack**

- Aluminum with excellent thermal
- Keeps temperature of the sample constant
- On-Ice Rack: Micro Tube (1.5 ml, 0.2 ml)
  On-Ice Rack (96W): 96-well Plate, Micro Tube (1.5 ml)

#### Storage Box & Cryo Box

- Material without deformation at low
- No needs for any labeling when using.
- Storage Box (SRB-100): 1.2 ~ 2.0 ml, 100 ea Cryo Box (CRB): 3 models according to size : 1.2~2.0 ml (25 ea), 1.2~2.0 ml (81 ea), 5 ml

# **Autoclave & Others**





#### **Autoclave**



#### **Pump**



#### **Ultrasonic Cleaner**



#### **Autoclave**

- $\bullet$  Convenient use with various operation mode for each usage.
- Sterilization process monitoring ensures reliable sterilization.
- Sterilization Temperature: 110 ~ 123°C
- Melting Temperature: 60  $^{\circ}$  100°C Sterilization Pressure at 121°C: 1.1  $^{\circ}$ 1.2 kg/cm² Volume: 50L / 65L / 85L / 105L

Model: ST

#### **Electrical Aspirator**

- $\bullet$  Fast formation of low vacuum state via two aspirators.
- Use PP having good chemical-resistance for contact parts of organic solvent.
- Free-air Capacity: 18L /min x 2 ea
- Max. Vacuum Range: 0.0998 Mpa
   Motor Capacity: 150 W
   Bath Volume: 9.5 L

Model: VE

#### **Rotary Vacuum Pump**

- Oil vacuum pump for formation of high vacuum state.
- Prevents air reflux, essentially used with vacuum ovens to achieve a higher level of vacuum pressure
- Pump Speed: 100 / 200 / 400 / 600 L/min

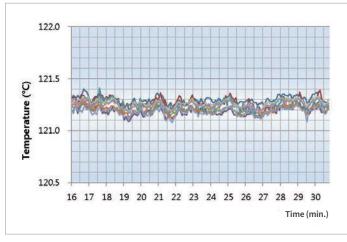
Model: W2V

#### **Ultrasonic Cleaner**

- Strong cleaning power by high-energy
- BLT Type vibrator.

   Easy drain of cleansing solution through drain valve.
- Frequency: 40 kHz • Ultrasonic Power: Max. 500 W

Model: UCP / UCS



Model: ST- 85G (measured with 10 of temperature sensors )

# **Aspiration Filter Adapter**

- It can be used between the filtering funnel and the filtering flask during
- Excellent sealing and adhesion with silicone material.

# **Hood & Clean Bench**



#### **Clean Bench**









#### Clean Bench

Advanced type

- Convenient dual controller (outside and inside of chamber).
- Fully compliant with validation requirements.

Clean	Bench
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Basic type

- Pressure gauge at front as standard accessory.
- Easy replacement of HEPA filter.

#### **PCR Workstation**

- UV blocking about 99.9% with transparent polycarbonate material.
- Essential for sensitive experiment such as PCR.
- Convenient shelf with pipette holder.

- Sterilization using UV lamp.
- Count-down timer.

Filter	HEPA Filter	HEPA Filter	HEPA Filter	-
UV Lamp	0	0	0	0
Fluorescent Lamp	0	0	0	0
Airflow	0	0	0	-
Model	BC-H	BC-B	PW	UVC

#### **Fume Hood**









#### **Ductless Fume Hood**

- Remove and circulate fume via built-in filter.
- No need duct. Convenient moving and installation.

#### **Extraction Arm Hood**

- Filter box type.
- Various hood and arms.
- Magnetic system for easy hood change. (Option.)

#### **Molded Fume Hood**

- Table top type with compact design.
- Easy use with connecting duct system.

#### Molded Observation Fume Hood

- Easy use with connecting duct system.
- Design by transparent windows at the front and the rear, making it easy to observe the experiment process from the both side.

Filter	
Model	

Selectable Activated Carbon, Acid, Formaldehyde, Ammonia/Amines and HEPA Filter.

DLH

Selectable Activated Carbon, Acid, Formaldehyde, Ammonia/Amines and HEPA Filter.

EFS-33 (Dual), EFS-33 (Single)

Selectable Activated Carbon, Acid, Formaldehyde, Ammonia/Amines and HEPA Filter.(EM-33)

PMH-720 + EM-33

Selectable Activated Carbon, Acid, Formaldehyde, Ammonia/Amines and HEPA Filter.(EM-33)

POH-720 + EM-33



Lab Companion's compose Hood and Clean Bench in optimized products protecting **experimenters**, **environments and samples**.

# Safety Storage & Cabinet





#### Safety







#### **Fire Safety Storage Cabinet**

- Safe storage of flammable / combustible materials in the event of a surrounding fire.
- Designed according to the strictest European standards EN 14470-1
- Fire proof performance: 30 min / 60 min / 90 min

#### **Acid Corrosive Cabinet**

- Acid/Base reagents can be safely stored for a long period of time
- Solid steel structure with corrosion-resistant interior finish.
- **Molded Acid Corrosive Cabinet**
- Durable chemical resistant plastic storage cabinets for Acid/Base materials reagents.
- Easy use with connecting filter or fan modules.

Internal Volume

Model

Stand (90min type): 763L / 357L Stand (30min type): 802L / 375L Under (90min type): drawer-244L / 110L Under (60min type): 89L / 76L Under (30min type): 252L / 116L

SC3-F / SC2-F + EM-33

※ Available to install Safety Waste Disposal System. (Option, p43)

Stand Type: 894L / 852L / 445L / 426L Under Type: 312L / 226L / 146L / 115L

SC-C + EM-33

※ Available to install Safety Waste Disposal System. (Option, p43)

Exterior Dimension: 720 x 472 x 535 mm

PCC-720

#### **General**





#### Multipurpose Cabinet Window

- · Window door type for easy figures out stored samples
- Drawer shelves with PP having good chemical -resistance, makes easy store.
- · Fume extraction module & filters. (option)

#### **Multiple Drawer Cabinet**

- $\bullet$  Solid design with steel body and 22 vertical shelves.
- Drawer-type shelf structure with sliding rails for convenient handling of stored materials located

Model

DS-OW

DS-OR

#### **Functional**







#### **Filtering Storage Cabinet**

- Filter installed inside, internal air circulation.
- · Easy moving and installation, safety warning alarm.

#### **Gas Cylinder Cabinet**

- Safe protection from external shock.
- Convenient folding ramp structure for replacing heavy cylinders.

Feature

Model

- Internal Volume: 604 L / 1317 L
- Capacity (L or 1L Bottle): 140 / 280
   Optional Filter: HEPA Filter, Complex Carbon Filter (Aldehyde, acid and amines are available.)

FSC

Gas Cylinder Max. storage capacity (Ø230 mm): 2 ea / 3 ea

DS-GC

# Desiccator



#### **Desiccator**



#### Desiccator

- Built-in hygrometer at front.
- Stackable structure for space saving.
- Drawer provided as standard for the convenient storage of small container.

Internal Volume	35L / 50L
Control Range	-
Model	SDC

※ Hygrometer deviation : 10%~20%

#### **Vacuum Desiccator**







#### **Vacuum Desiccator**

Cubic type

- $\bullet$  Keep vacuum of 1 Torr for 72hours.

		Standard vacuum gauge at from.
Interr	nal Volume	11L / 23L / 35L / 45L
Mater	ial	Body, Shelf: PC / Desiccant Tray, Latch: PP
Mode	l	VDC, VDC-U

#### **Vacuum Desiccator**

Round type

- Durable one-mold design makes no leak.
- UV block models are available.

6L / 10L / 20L
Lid, Bottom: PC / Desiccant Tray, Locker: PP
VDR, VDR-U

#### **Vacuum Desiccator**

Cylinder type

- Standard 3-way stopcock valve.
- Transparent for easy observation.

Body, Bottom: PC / Locker: PP VDP, VDP-U







We have intensified the user convenience of Lab Companion Desiccator through configuring outstanding durability and various product lines considering purpose of use.

# Refrigerator & Freezer for Laboratory/Medical





### **Laboratory Refrigerator**

#### **Laboratory Refrigerator**

- · Automatic defrosting function.
- Controller lock & built-in key lock system.
- Safety warning such as temperature deviation, door open and so on.
- 2 kinds of door type (glass/solid), various volume.
- Satisfied required condition of cold storage for pharmaceuticals stability.
- Voice alarm system (option)
- $\bullet \ \mathsf{LC} \ \mathsf{Connected} \ \mathsf{system} \ \mathsf{(option, only for CLG3 \ model)} \\$

Temp. Range	2 ~ 10°C
Internal Volume	74L / 156L / 303L / 603L / 805L / 1327L
Model	CLG / CLG3



#### **Laboratory Freezer**

#### **Laboratory Freezer**

- Excellent thermal insulation and sealing to make keep stable temperature.
- Dual defrost systems (automatic/manual).
- Controller lock & built-in key lock system.
   Safety warning such as temperature deviation, door open and so on.
   Simultaneously displays set temperature and actual temperature.

Temp. Range	-25 ~ -15°C	-35 ~ -25°C
Internal Volume	154L / 303L / 647L	154L / 303L / 647L
Model	FMG	FCG



#### **Medical Refrigerator**

#### **Pharmaceutical Refrigerator**

- $\bullet$  Verified temperature variation by KS P 6108 and DIN 13221.
- Authorized for manufacturing medical devices. (No. 3333 registered by KFDA) Temperature Range:  $2{\sim}10^\circ\text{C}$ .
- Satisfied required condition of cold storage for pharmaceuticals should maintain 5±3°C regardless of quantities of stored pharmacies.
- Voice alarm system. (option)
- LC Connected system. (option)

Chamber Volume	73L
Temp. Range	2 ~ 10°C (5°C set point)
Model	PSR3





# Temperature & Humidity Chamber



#### **Tabletop**

Temperature Range

**Humidity Range** Airflow type

Chamber Volume Model



**Temperature & Humidity Chamber** 

• Provides maximized performance in limited space.

• Suitable for development step of small samples.

-20 ~ 150°C

20 ~ 95 %RH

TH3-ME

Vertical airflow

Tabletop type

20 ~ 95 %RH

Vertical airflow

25L / 65L / 100L

TH3-KE

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#### **Floor Standing**





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#### **Temperature & Humidity Chamber**

Ultra low temperature (-70°C) type

- Extended temperature range from -70 to 150°C.

	Stable temp and humid control up to 95%RH.
Ì	- 70 ~ 150°C
ĺ	25 ~ 95 %RH
Ī	Vertical airflow
	189L / 302L / 408L

#### **Temperature & Humidity Chamber** Low temperature (-40°C) type

- Representative model with proven reliability. Minimized water consumption & maintenance.
- 25 ~ 95 %RH Vertical airflow 189L / 302L / 408L / 800L / 1000L / 1450L

#### **Floor Standing**



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TH-KH

0 ~ 120°C

TH3-PE

30 ~ 95 %RH

Vertical airflow



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#### **Temperature & Humidity Chamber**

Low temp. & Low humid. (-40°C) type

• Stable controls for low temperature and humidity

#### **Temperature & Humidity Chamber** General (-5°C) type

- Stable temperature and humidity control for even during long-term continuous use over 1 year.
- · Convenient internal observation with LED lamp and looking glass window.
- Space efficiency model that controls two upper and lower chambers individually. • Provide optimized experiment environment with

**Temperature & Humidity Chamber** 

Dual type

TH-DG

precise temp. & numia. controls.
-5~100°C
15 ~ 90 %RH
Vertical airflow
150L x 2 Chamber / 288L x 2 Chamber / 384L x 2 Chamber

Temperature Range	-40 ~ 150°C	- 5 ~ 100°C	- 5 ~ 100°C
Humidity Range	15 ~ 95 %RH	10 ~ 95 %RH	25 ~ 95 %RH
Airflow Type	Vertical airflow	Vertical airflow	Vertical airflow
Chamber Volume	189L / 302L / 408L	180L / 314L / 419L	770L / 997L / 1540L
Model	TH-I	TH-TG	

#### **Floor Standing**

Temperature Range Humidity Range Airflow Type Chamber Volume Model





#### **Pharmaceutical**





#### **Pharmaceutical Stability Test Chamber**

- Convenient operation with multifunctional 5.6 inch color touch controller.
- Possible to check the operation status with graphs.

**Temperature & Humidity Chamber** 

Basic type

- Satisfies ICH Guideline Q1A (R2) & Q1B (Option 2) Stability Test.
  - · Dedicated controller for light cumulative dose

	Setting/control.
0~90 °C	-5 ~ 85°C
35~85%	20 ~ 85 %RH
Vertical airflow	Vertical airflow
201L / 398L	300L / 760L
TH3-E	TH-ICH

#### **✓** Walk-in Chamber

- Excellent thermal insulation and sealing to ensure reproducibility even for long-term use.
- Stable temp. & humid. controls with optimized inner air circulation.
- Durable door system.
- · Convenience multiple safety system.



# Heating & Cooling Chamber



#### **Tabletop**



#### **Floor Standing**



#### **Heating & Cooling Chamber**

Tabletop type

- Provides maximized performance in limited space.
- $\bullet$  Suitable for development step of small samples.

#### **Heating & Cooling Chamber**

General type

- Suitable for temperature characteristic test of samples.
- Space-saving vertical structure of dual chamber model.

#### **Heating & Cooling Chamber**

- Ultra low (-70°C) / Low temp.(-35°C) type
- Wide range from low to high temperature.
- Provided reliability specification of fluctuation and gradient.

Temperature Range	-40 ~ 150°C	- 20 ~ 150°C	- 20 ~ 100°C	0 ~ 100°C	- 70 ~ 180°C	-35 ~ 180°C
Airflow Type	Vertical airflow	Vertical airflow	Horizontal airflow	Horizontal airflow	Horizontal airflow	Horizontal airflow
Chamber Volume	25L / 65L / 100L	25L / 65L / 100L	150L / 255L / 485L / 150 x 2 Chamber	150L / 255L / 485L / 150 x 2 Chamber	125L / 253L / 420L / 720L / 1000L	125L / 253L / 420L / 720L / 1000L
Model	TC3-KE	TC3-ME	LCH	LCH-G	KBD	KMV

#### **Floor Standing**





#### **Heating & Cooling Chamber**

Low temp.(-35°C) type

-35 ~ 180°C

Vertical airflow

 $\bullet$  Vertical airflow and temperature range from -35 to 180  $^{\circ}\text{C}.$ 

125L / 253L / 420L / 720L / 990L

Electronic over temperature protection system.

Hea	tıng	&	Cod	olii	ng	Char	mber
			۱ م م		1		/

Low temp.(-25°C) / Ambient temp.(-5°C) type

• Wide range from low to high temperature.

<ul> <li>Provided reliabili</li> </ul>	ity specit	ication o	f fluctuation	on and
gradient.				

- 25 ~ 100°C	- 5 ~ 100°C
Horizontal airflow	Horizontal airflow
125L / 250L / 400L / 700L /	1000L
PBV	PMV

#### **Industrial Oven**

Temperature Range Airflow Type

Chamber Volume

Temperature Range Airflow Type Chamber Volume Model

Model





#### **Heating Chamber**

- Verified 27 point fluctuation and gradient.
- Excellent insulation, sealing and durable structure.

#### Built-in class 100 HEPA filter-high temperature

Clean Oven

Amb. + 45 ~ 250°C	Amb. + 45 ~ 350°C
Horizontal airflow	Horizontal airflow
125L/253L/420L/720L/1000L	125L/253L/420L/720L/1000L
I B\/	LTV/

• Duitt III Class 100 HEFA III	itei iligii terriperature
testing under clean cond	itions.
Amb +15 = 200°C	Amb +15 = 200°C

Amb. +15 ~ 200°C	Amb. +15 ~ 300°C
Vertical airflow	Vertical airflow
200L / 400L	200L / 400L
OFC / OFC-P	OFC-H / OFC-HP

## **Lab Essentials**

We research and provide a selection of lab essentials steadily suitable for the customer's experiment.





- Easily sprayed solution even when lightly pressed for convenience.
- Vapor pressure self-discharge structure inside the container eliminates the inconvenience of liquid flowing out.
- Double helical structure increases tightness of both container and cap-
- $\bullet$  Replaceable nozzle tip for effective maintenance.
- $\bullet$  Engraved markings for convenient capacity checking.
- 250ml / 500ml





#### **Economical Beaker**

- The unique triangular spout structure allows even highly viscous solutions to be poured precisely without any dripping.
- 50ml / 100ml / 250ml / 500ml



#### **Plastic Beaker**

- Transparent (PMP), Translucent (PP)
- 500ml / 1000ml / 2000ml



#### Carboy

- Excellent chemical resistance, suitable for storage and dispensing of various liquids.
- Leakless spigot even using for a long time.



#### **Tubing Connector**

- Structure that makes a sturdy tube connection.
- Excellent chemical resistance due to PP material.
- Available up to 120°C.



#### Handle Beaker

- Transparent (PMP), Translucent (PP)
- 500ml / 1000ml / 2000ml



#### On-Ice Rack

- Block made of aluminum with excellent thermal conductivity.
- Keeps the temperature of the sample constant when using on ice.



#### Handle Beaker

- No transform even at low temperature.
- No need labeling additionally.









#### Filter Adapter

- Can be used between the filtering funnel and the filtering flask during vacuum filtration.
- Excellent sealing and adhesion with silicone material.

#### **Clamp Holders**

- Clamp holders are ideal for use with overhead stirrers and
- Adjustable to fit support rods up to 5/8 inch diameter.

#### **Tube Rack**

- Available stored various sizes for centrifuge tube / Conical Tube / Micro Tube.
- PC material.







Easy simultaneous handling of several flasks.



Using for multi-purpose.



Convenient movement with side handles.



Easy to distinguish samples by name tags and numbers.

#### Flask Support

- Safe storage and handling of round flasks.
- Excellent chemical resistance and heat resistance. (-30 to 120°C)



#### Safety Waste Disposal System

• Easy to collect and store various chemicals and waste liquids generated in the lab.



Waste liquid level notification It is possible to configure function.



a container together with flammable cabinets.

※ Fire Safety Storage Cabinet (p 33)



Classified color label and lid color according to chemical properties.



Exclusive carbon filter (option)

Model	SF-14C	SF-14P	WT-20C	WT-20P
Description	Anti-static safety funnel	General use safety funnel	Anti-static liquid waste container	General-purpose liquid waste container
Volume	1L	1L	22L	22L





#### **Laboratory Equipment**





#### **Storage & Cabinet**

Fire Safety Cabinet
Acid Corrosive Cabinet
Filtering Storage Cabinet
Gas Cylinder Cabinet
Multiple Drawer Cabinet
Desiccator



#### **Hood & Clean bench**

Clean Bench
PCR Workstation
UV Sterilization Cabinet
Ductless Fume Hood
Extraction Arm Hood



#### **Refrigerator & Freezer**

Laboratory Refrigerator & Freezer Pharmaceutical Refrigerator



### **Environmental Reliability Test Chamber**

Temperature & Humidity Chamber Heating & Cooling Chamber Heating Chamber, Industrial



#### **Lab Essentials**

Plastic Ware Safety Product

#### **Lab Companion Korea**

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