

Incubator (Natural Convection, Air Jacket)

Programmable

IS402/602/802/902

Operating temp. range RT+5°C~80°C

Temp. distribution accuracy $\pm 1.0^{\circ}\text{C}$ (at 37°C)

Internal capacity 97L IS402 159L IS602 318L IS802 567L IS902

Natural convection incubators equipped with various functions.

- Air-jacket method makes it possible to obtain uniform temperature distribution.
- Fixed temperature, Quick auto stop, Auto stop, Auto start, Program functions are available.
- Program function: 6 pattern(10~30 steps).
- Samples can be observed through the inner door.
- Safety device includes self-diagnosis, key lock and earth leakage breaker.
- Various optional system upgrade such as external communication terminal and time up output terminal.
- Models IS402/602 stackable.
- Operation before power failure can be resumed.



97L
IS402+ON61 (Option)

159L
IS602+ON61 (Option)

Specifications

Product code		212555	212556	212557	212558
Model		IS402	IS602	IS802	IS902
System		Natural convection by air jacket			
Operating temperature range		RT+5°C~+80°C			
Temp. control accuracy*1		JTM K05 ±0.2°C (at 37°C)			
Temp. fluctuation*1		JIS 0.8°C (at 37°C)			
Temp. distribution accuracy*1		JTM K05 ±1.0°C (at 37°C)			
Temp. gradient*1		JIS 2.0°C (at 37°C)			
Time required to reach 60°C*1		Approx. 70min		Approx. 90min	
Interior material		Stainless steel			
Exterior material		Chrome-free electrogalvanized steel sheet baking finish			
Heater		Iron-chrome wire heater			
		0.3kW	0.36kW	0.73kW	1.2kW
Exhaust port		30 mm I.D. ×2 pcs (on the top)		30 mm I.D. ×2 pcs (side)	
Inner door		5mm thickness reinforced glass			
Temp. controller		PID control by microprocessor			
Temp. setting method		Digital setting with key			
Temp display method		Digital display by LED			
Timer		0 min. to 99 hrs. 59 min. and 100 hrs. to 999.5 hrs. (Timer wait function, ON/OFF settable)			
Min. division		1 min. or 10 min.			
Operation function		Fixed temperature operation, Quick auto-stop, Auto-stop, Auto-start operation, Program auto-start			
		Program operation 6 patterns, (10~30 steps), Repeat function. Step wait, Step hold, Step skip			
Additional functions		Calibration offset, Key lock, Power failure compensation			
Temp. sensor		Pt100 / K thermocouple			
Safety device		Self diagnosis functions (Temp. sensor abnormal, Heater disconnection, SSR short circuit, Main relay failure, Automatic overheat prevention), Key lock function, Over current breaker, Resume function, Door key, Adjuster (IS802/902)			
Internal dimensions		W450×D480×H450mm	W600×D530×H500mm	W600×D530×H1,000mm	1,070×530×1,000
External dimensions*2		W560×D606×H820mm	W710×D656×H870mm	W710×D655×H1,611mm	1,180×655×1,619
Internal capacity		97L	159L	318L	567L
Shelf plate load		Approx. 15 kg/piece			
Shelf rest step number		11 steps	13 steps	29 steps	29 steps×2
Shelf rest pitch		30 mm			
Power source (50/60Hz)		AC115V / AC220V Single phase			
Weight		Approx. 55 kg	Approx. 65 kg	Approx. 105 kg	Approx. 166 kg
Accessories	Shelf plate/ bracket	Stainless steel punched metal, 2 pcs./ 4 pcs.	Stainless steel punched metal, 3 pcs./ 6 pcs.	Stainless steel punched metal, 5 pcs./10 pcs.	Stainless steel punched metal, 10 pcs./ 20 pcs.
	Key	2 pcs.	2 pcs.	2 pcs.	4 pcs.

The length of the power cord is about 2m outside the unit.

*1 Conditions: temperature and humidity: 23°C $\pm$ 5°C, 65%RH $\pm$ 20% (no load) *2 Do not include protrusions

Natural convection
by air jacket

Self-diagnosis

Overheat protector

Key lock

Overcurrent
ELB

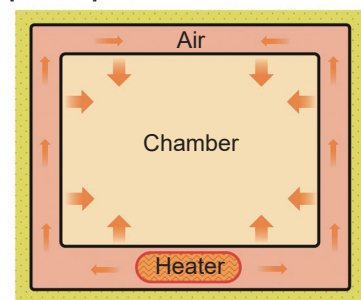


Control Panel



Method

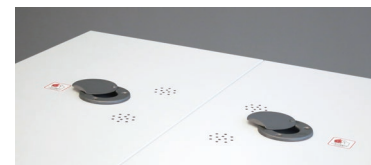
[Front view]



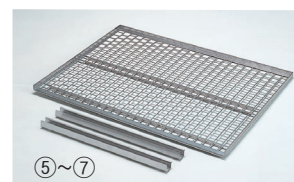
Interior (IS902)



Exhaust port (IS402/602)



* IS802/902 are located on the side.



Stainless punching metal shelf
(with bracket 2pcs)



Seismic mat

Optional items

No.	Description	Model	Product code
①	Stand	for IS402/IS602	ON61 211856
②	Stacking support	for IS402	OD40 212822
③	Stacking support	for IS602	OD60 212823
④	Seismic mat	for IS402/IS602	- 296902
⑤	Stainless punching metal shelf (with bracket 2pcs) (Loading up to 15kg/shelf)	for IS402	- 212246
⑥	Stainless punching metal shelf (with bracket 2pcs) (Loading up to 15kg/shelf)	for IS602/IS802	- 212266
⑦	Stainless punching metal shelf (with bracket 2pcs) (Loading up to 15kg/shelf)	for IS902	- 212371
⑧	*Cable port, 25mm dia	for All models	ODK32 281121
⑨	*Cable port, 50mm dia	for All models	ODK34 281122
⑩	*External communication terminal (RS485)	for IS402	OA001 281142
⑪	*External communication terminal (RS485)	for IS602	OA005 281143
⑫	*External communication terminal (RS485)	for IS802	OA009 281144
⑬	*External communication terminal (RS485)	for IS902	OA013 281145
⑭	*External Communication Adapter (Changeable to RS232C)	for All models	OA017 281146
⑮	*External alarm terminal	for IS402	OA002 281149
⑯	*External alarm terminal	for IS602	OA006 281150
⑰	*External alarm terminal	for IS802	OA010 281154
⑱	*External alarm terminal	for IS902	OA014 281155
⑲	*Time-up output terminal	for IS402	OA003 281160
⑲	*Time-up output terminal	for IS602	OA007 281161
⑲	*Time-up output terminal	for IS802	OA011 281162
⑲	*Time-up output terminal	for IS902	OA015 281163
⑲	*Temperature output terminal (4-20mA)	for IS402	OA004 281164
⑲	*Temperature output terminal (4-20mA)	for IS602	OA008 281165
⑲	*Temperature output terminal (4-20mA)	for IS802	OA012 281171
⑲	*Temperature output terminal (4-20mA)	for IS902	OA016 281173

* Please specify when ordering main unit.

Dimensions (mm)

