

# Double Chamber Incubator (Natural Convection & Low Temp.)

High temp. in upper chamber, low temp. in lower chamber

**INC820**

Air jacket  
(Upper chamber)

Forced convection circulation  
(Lower chamber)

Cable hole

Self-diagnosis

Overheat protector

Overcurrent  
ELB

Operating temp. range RT+5~80°C Upper chamber 4~50°C Lower chamber

Temp. distribution accuracy ±1.0°C (at 37°C)

Internal capacity 150L Upper chamber 143L Lower chamber

**High-temp. and low-temp. incubation conducted for 1 set of product simultaneously.**

## Operation and functions

- Upper chamber is fixed-temp. constant temp. oven with timing function and overheat protector while lower chamber is low constant temp. incubator available to set 6 programs of 30~10 steps.
- Lower chamber has cycle/manual defrost function, easy to defrost.
- Door locks are set at both upper and lower chambers.

## Safety features

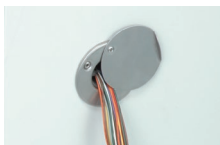
- Self-diagnosis circuit (abnormal temp. sensing, heater dis-connection, auto overheat prevention, SSR short circuit), overheat protector, electric leakage breaker, key lock, etc.



150L (Upper chamber)  
143L (Lower chamber)  
INC820

## Cable Port

Upper chamber, I.D. φ 30mm (SUS)

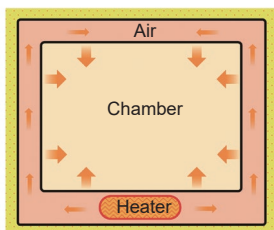


Lower chamber, I.D. φ 50mm (Resin)

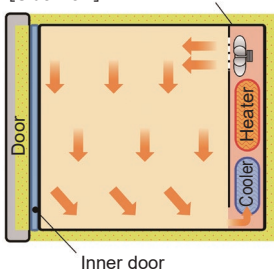


## Method

Upper chamber  
[Front view]



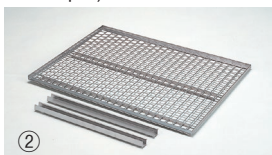
Lower chamber (Low temp.)  
[Side view] Circulation fan



Stainless punching metal shelf  
(with bracket 2pcs) for Upper chamber



Stainless punching metal shelf  
(with bracket 2pcs) for Lower chamber



\*Shelves and brackets are different in size for the upper and lower chamber.

## Specifications

product code	211210	
<b>Model</b>	<b>INC820</b>	
System	Natural convection by air jacket	Forced convection circulation
Basic constitution	Upper chamber: High temp. incubator	Lower chamber: Low temp. incubator
Operating temperature range	RT+5~80°C	4~50°C
Temp. control accuracy*1	±0.5°C(at 37°C)	±0.3°C(the refrigerator in continuous operation)
Temp. distribution accuracy*1	±1.0°C (at 37°C)	±1.0°C (at 37°C the refrigerator in continuous operation)
Interior material	Stainless steel	
Refrigerator, refrigerant	--	Air cooling 250W, R404A
Defrost structure	--	Manual / cycle
Cable hole	I.D.30mm (right side)	I.D.50mm (right side)
Exhaust port	30mm on the top with damper, 2 pcs.	--
Controller	VS3 fixes temp. operation	VS4 program operation
Sensor	Pt100 Ω	
Operation function	Fixed temp., Quick auto stop, Auto start, Auto stop	Program (30 steps×1, 15 steps×2, 10 steps×3), Fixed temp., Quick auto stop, Auto start, Auto stop
Safety device	Self-diagnosis circuit (Abnormal temp. sensing, Heater disconnection, Auto overheat prevention, SSR short circuit), Key lock, Overheat protector, Overcurrent ELB	
Internal dimensions	W600×D530×H500mm	W600×D477×H500mm
External dimensions*2	W710×D656×H1792mm	
Internal capacity	150L	143L
Shelf plate load	15kg / pc.	
Shelf rest step number / pitch	13 steps / 30mm	13 steps / 30mm
Power supply (50/60Hz) rated current	AC220V 7A single phase with step-down transformer	
Weight	Approx. 160kg	
Shelf plate	Stainless punching metal	
Shelf / Shelf brackets	2 pcs. / 4 pcs.	3 pcs. / 6 pcs.
Door key	2 pcs / each chamber	

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

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

## Optional items

No.	Description	Product Code
①	Stainless punching metal shelf (with bracket 2 pcs.) (loading up to 15kg/shelf) for Upper chamber	212266
②	Stainless punching metal shelf (with bracket 2 pcs.) (loading up to 15kg/shelf) for Lower chamber	211221
③	Stainless wire shelf (with bracket 2 pcs.) (loading up to 20 kg/shelf) for Upper chamber	213464
④	Stainless wire shelf (with bracket 2 pcs.) (loading up to 20 kg/shelf) for Lower chamber	211898
⑤	Drain water tray (4L, SUS) Mounted under the main body	213466
⑥	*External communication terminal (RS485) / chamber	281125
⑦	*External communication adapter, RS485-RS232C (conversion) / chamber	281126
⑧	*Temperature output terminal (4-20mA) ODK12 / chamber	281123

\* Please specify when ordering main unit.