

Laboratory Incubator
IN604/604W/804



Best selling machines for low temperature tests and environmental tests.

Operating temp. range
-10 to +50 deg.C
Temp. distribution accuracy
±1.0deg.C (at 37deg.C)
Internal capacity
143L (Model 604)/286L (Model 804)

- Available for wide variety of applications from various constant temperature tests to environmental tests.
- Forced circulation with a fan enables high accuracy temperature control and even temperature distribution within the product.
- Employment of a large dual-glass door which, with the inner door, forms a triplex glass to improve temperature heat retention.(Model IN604W)
- A convenient slide shaker table (optional) is available to make taking out / putting in samples easier. (Model IN604W)
- Room light to make inside the unit easily visible as standard. (10W fluorescent lamp)(IN604W)
- The glass inner door keeps temperature changes during observation samples minimum
- Employs coolant R404A that complies with Freon regulations.

■ Specifications

Product code		211289	211290	211280
Model		IN604	IN604W	IN804
System		Forced blower convection		
Performance	Operating temperature range	-10 to +50deg.C		
	Temperature adjustment range	±0.3deg.C (during continuous operation of freezer)		
		±1.0deg.C (during operation of freezing cycle)		
	Temperature distribution accuracy	±1.0deg.C (continuous operation of freezer at 37deg.C)		
	Time to attain the max. temperature	20 to 50deg.C Approx. 20 min		20 to 50deg.C Approx. 30 min.
Time to attain the lowest temperature	20 to -10deg.C Approx. 45 min/20 to 4deg.C Approx. 55 min	20 to -10deg.C Approx. 55 min.	20 to -10deg.C Approx. 65min.	
Configuration	Interior	Stainless steel plate		
	Exterior	Chrome free electronic galvanized plated steel plate Chemical proof baking finish		
	Door		Observation window (W516 x H416 mm), with keys (x2)	
	Heat insulator	Styrene foam (non-freon)		
	Freezer	Air-cooled fully closed compressor 250W		Air-cooled fully closed compressor 300W
	Freezer cooling medium	R404A		
	Defrosting mechanism	Manual ON/auto OFF, timer operation, cyclic operation		
	Blower fan	Axial flow fan		
	Heater	Iron-chrome wire heater: 550W		Iron-chrome wire heater: 750W
	Sensor	Double sensor: Platinum resistance temperature detector :Pt100Ω(temperature controller), K-thermocouple (overheat preventive device)		
	Cable port	I.D.: 32 mm (at the right side of the main unit)	I.D.: 50 mm (at the right side of the main unit)	I.D.: 32 mm (at the right side of the main unit)
	Room light/service outlet	-	Fluorescent lamp: 10W/5A with a grounding terminal	-
	Controller	Temperature control system	PID control	
Temperature setting system		Digital setting system with UP/DOWN keys.		
Temperature display/information display		4-digit LED digital display/"Katakana" character fluorescent tube display		
Timer/timer resolution		0 to 999 hrs 59 min/1 min		
Operation functions		Fixed value operation, program operation, auto stop, auto start		
Program mode		Up to 32 steps, repeat, gradient operation		
Additional functions		Timer function (accumulated time to 49,999 hrs, calibration offset function, clock display)		
Safety unit	Self diagnostic function (temp. sensor error, heater disconnection, SSR short-circuit, main relay error, automatic overheat prevention function), key lock, over current ELB, overheat preventive device			
Standards	Internal chamber size	W600 x D477 x H500 mm		W600 x D477 x H1,000 mm
	External size	W710 x D645 x H913 mm		W710 x D645 x H1,630 mm
	Internal volume	143L		286L
	Withstand load of shelf	15 kg/unit		
	No.of internal shelf stages/shelf support pitch	13 stages/30 mm		23 stages/30 mm
	Power supply (50/60) Hz rated current	AC100V 10A (15A)/AC100V 12A (15A)	AC100V 12A (15A)	AC100V 50/60 Hz 12A (15A)
	Weight	Approx. 89 kg		Approx.120 kg
Accessories	Shelf/shelf support	Stainless steel punched metal 3 stages/6		Stainless steel punched metal 5 stages/10
	Door keys	2 keys for IN604W only		

■ Control panel



143L IN604W (Stand is optional.)

■ Internal chamber (IN604)

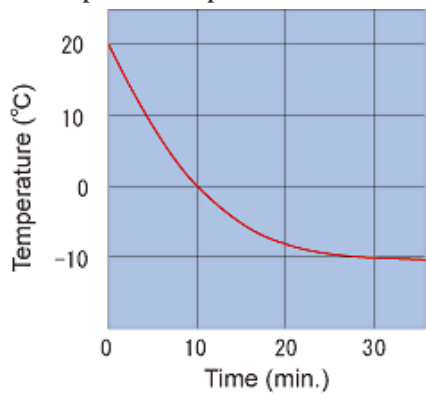


■ Shaker can be installed (IN604W)



Example with a slide shaker stage (optional) and a micro shaker MK161 (Keep operating temperature at 35deg.C or below.)

■ Temperature drop characteristic curve (IN604)



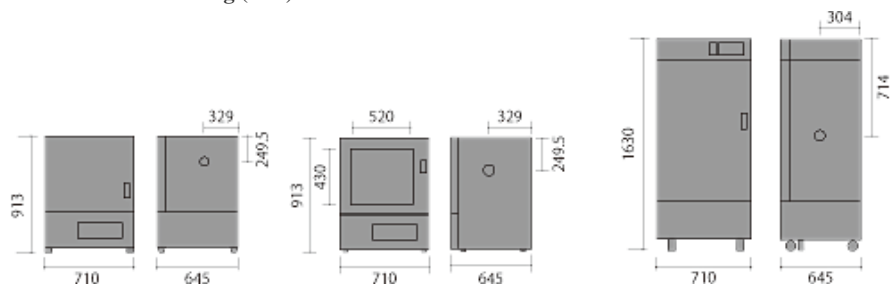
■ Room light (IN604W)



■ Shelf / Shelf support



■ Dimensional drawing (mm)



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■ Optional items

Remark	Description	Option Model	Main Unit Model No.	Item Code
	Stand	ON61	IN604/IN604W	211856
	Stacking support	OD60	IN604/IN604W	212823
	Stainless punching metal shelf (loading up to 15kg/shelf)	-	In series	211221
	Stainless wire shelf (with support 2 pcs., loading up to 20 kg/shelf)	-	In series	213464
●	External Communication Function (RS422A)	-	In series	281166
●	External Communication Adapter (changeable to RS232C)	-	In series	281167
●	Temperature output terminal	-	In series	281168
●	External Alarm Terminal	-	In series	281169
●	Time-up Output Terminal	-	In series	281170
	Shaker setting stage with slide rail	-	IN604W	211318
	Drain water tray	-	In series	213466

Note:

The item marked " ● " in the column of "Remark" shall be ordered together with the main unit.