



# Low Temperature Incubators

## Model IN602 / 602W / 802

### Model

602/602W 802

### Operating Temperature Range

-10°C ~ +50°C

### Temp. Distribution Accuracy

±1.0°C (at 37°C)

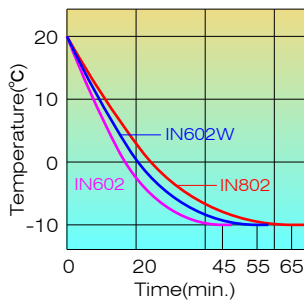
### Internal Capacity

143ℓ 286ℓ

These programmable low temperature incubation chambers can be used for a wide variety of applications, such as storage of culture media, serum, and medicine, as well as for cultivation of microorganisms, and incubation to environmental testing.

- Glass inner doors minimize temperature change when inspecting samples.
- Fixed setting, programmed (maximum 32 steps, repeat, and graduated operation), Auto stop, and Auto start operating modes are possible, along with easy control capabilities.
- Calibration offsetting and integrating time calculation, key lock, and other added functions.
- R404A coolant complies with chloro-fluorocarbon regulations.
- Defrosting with either manual control using dedicated keys or automatic control through programmed operation.
- Comprehensive safety features.

### Temp. Descending Curve



### Control Panel



### Interior



IN602

### Shelf Plate





# Low Temperature Incubators

Yamato

Forced Convection

## Specifications

Model	IN602	IN602W	IN802
<b>Performance</b>			
Circulation method	Forced air circulation		
Operating temperature range	-10~+50°C		
Temp. adjustment accuracy	±0.3°C [IN602/602W] / ±0.5°C [IN802] (when refrigerator is in the continuous operation) ±1.0°C (when refrigerator is in the cycle operation)		
Temp. distribution accuracy	±1.0°C (when refrigerator is in the continuous operation at 37°C)		
Max. temp. reaching time	+20°C~+50°C approx. 20 min.	+20°C~+50°C approx. 20 min.	+20°C~+50°C approx. 30 min.
Min. temp. reaching time	+20°C~-10°C approx. 45 min.	+20°C~-10°C approx. 55 min.	+20°C~-10°C approx. 65 min.
<b>Components</b>			
Interior Material	Stainless steel SUS 304		
Exterior Material	Electro-galvanized steel plate with baked-on epoxy and melamine resin finish		
Inner door	5mm thick reinforced glass		
Observation window	None	520W × 430Hmm	None
Heat insulating material	Styro-form (non-freon)		
Refrigerator (medium : R-404A)	Air cooling enclose type, 250W		Air cooling enclose type, 300W
Defrosting mechanism	Manual ON/automatic OFF, Timer or cycle operation		
Fan type	Axial fan		
Heater	Iron-chrome wire heater, 550W		Iron-chrome wire heater, 750W
Sensor	Platinum resistance bulb for temp. control, K-thermocouple for overheat prevention (double sensor)		
Cable hole	32 mm I.D. (the right side)	50 mm I.D. (the right side)	32 mm I.D. (the right side)
Indoor lighting / Receptacle	None	Fluorescent lamp 10W / 5A	None
<b>Controller</b>			
Temp. controller	PID control by micro processor		
Temp. setting method	Digital setting by ▲▼ key		
Temp display method	Digital display orange LED (4 digit)		
Timer / Min. division	0 min. to 999 Hrs. 59 min / 1 min		
Operation function	Fixed temperature operation, Program operation, Auto-start, Auto-stop		
Program mode	Program operation : Max. 32 steps, Repeat and graduated operation		
Additional function	Integrating time function (up to 49,999 hours), Calibration offset function, Time display, Main relay abnormal Fan stop		
<b>Safe Device</b>			
Safety countermeasures	Self diagnosis functions (temp. sensor abnormal, Heater disconnection, SSR- short, Automatic overheating prevention), Key lock function, Independent overheat prevention, Electric leakage breaker with over current protection		
<b>Standard</b>			
Internal dimensions(W × D × Hmm)	600 × 477 × 500		600 × 477 × 1.000
External dimensions(W × D × Hmm)	710 × 645 × 915		710 × 645 × 1.630
Internal capacity	143 liters		286 liters
Shelf plate with standard load	Approx. 15 kg / piece		
Shelf rest step number / pitch	13 steps 30 mm		23 steps 30 mm
Power source 50/60Hz	100/220V, single phase, 10.0A/4.6A		100/220V, single phase, 12.0A/5.5A
Weight	Approx. 89 kg		Approx. 130 kg
<b>Accessories</b>			
Shelf plate	Stainless steel, 3 pcs.		Stainless steel, 5 pcs.
Shelf bracket	6 pcs.		10 pcs.
<b>Optional Accessories</b>			
Stand / Fitting for stacking / Additional shelf plate / External communication terminal(RS485) / Temp. output terminal / External communication adaptor (RC23) / Hybrid recorder / Shaker stand with slide rail for IN602W etc.			

- The performance shown here is the value under the condition of the ambient temperature of 23°C±5°C, humidity of 65%RH±20%.
- The projection is not included for Internal dimensions and External dimensions.



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