

Programmable Refrigerated Eco Incubator



Forced Air Convection

INE800-115V / INE800-220V

Temperature range 0~+60°C

Temp. distribution accuracy ±0.5°C (at 37°C during continuous operation)

Internal capacity 286L

Inverter control Energy savings



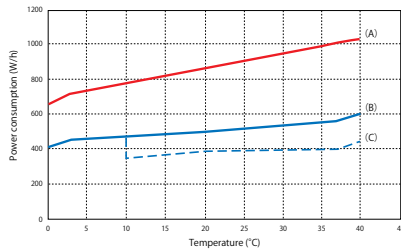
Upgraded inverter control improved refrigeration efficiency, reduced frost significantly and minimized wasted power during refrigeration.

- 44% power savings compared to previous models
- Controller upgraded for easier viewing and operability
- Temperature distribution accuracy improved for better incubation
- Standard equipped with program operation, auto-stop, auto-start, self-diagnostic, timer, calibration off-set, memory, and electricity & CO₂ emission monitor

Specifications

Model	INE800-115V	INE800-220V
System	Forced air convection	
Operating temperature range	0~+60°C	
Setting temperature range	-5~+65°C	
Temperature adjustment accuracy	±0.2°C (at 37°C during continuous operation), ±0.5°C (at 37°C cycle operation)	
Temperature fluctuation	±0.3°C (at 37°C during continuous operation), ±1.0°C (at 37°C cycle operation)	
Temperature distribution accuracy	±0.5°C (at 37°C during continuous operation)	
Temperature gradient	2.0°C (at 37°C during continuous operation)	
Max. temperature reaching time	20~60°C 35min.	
Min. temperature reaching time	20~0°C 50min.	
Cooling Mechanism	Continuous operation, Cycle operation, Cooling-stop operation	
Interior	Stainless steel	
Exterior	Chromate-free electrogalvanized steel plate Baked chemical resistant finish	
Heat insulator	Styrene foam (non-freon)	
Freezer	200W Rotary Unit	
Cooling Medium	R134a 350g	
Operation range of freezer	Below 40°C	
Defrosting mechanism	Hot Gas Bypass Method, Manual (random) Defrost / Auto (time) Defrost	
Blower fan	DC Axial flow fan 4-Step, Equipped with Error Signal when stopped	
Heater	Iron-chrome wire heater : 750W	
Sensor	Double sensor: Platinum resistance temperature detector: Pt100Ω (temperature controller), K-thermocouple (overheat prevention device)	
Cable port	I.D.: 50 mm (right side of main unit)	
Temperature controller	PID control by microprocessor	
Temperature Display	Setting Temp. Display : 5-digit orange LED digital display, Actual Temp. Display : 4-digit green LED digital display	
Timer / timer resolution	0~99hr. 59min. / 1min.	
Operation function	Fixed temperature, Auto start, Auto stop, Quick auto stop, Program (99 steps, 99 patterns)	
Additional function	Timer, Calibration off-set, Electricity & CO ₂ Emission Monitor, Voltage Recovery Optional, User Setting saving/readout, Calendar timer (24 hours)	
Safety device	Self diagnostic function (temp. sensor error, heater disconnection, SSR short-circuit, main relay error, automatic overheat prevention), Key lock, Overcurrent electric leakage breaker, Overheat prevention device, Fan malfunction detector, Cooling high-pressure detector, Inverter malfunction detector	
External dimensions	W710 x D645 x H1730mm	
Internal dimensions	W600 x D477 x H1000 (effective 800) mm	
Internal capacity	286L	
Shelf load capacity	15 kg/pc.	
Shelf rest step number / pitch	23 steps / 30mm	
Power supply (50/60 Hz)	AC115V 8.7A (with plug)	AC220V 4.5A (no plug, round terminal)
Weight	~135kg	
Included accessories	Stainless steel punched metal 5 pcs. shelf / 10pcs. brackets, 2 keys, silicon stopper for cable hole 1 pc	

Power Consumption Comparison



	0°C	3°C	20°C	37°C
IN804	648	712	864	1007
INE800	409	446	498	560
Reduction Rate	37%	37%	42%	44%

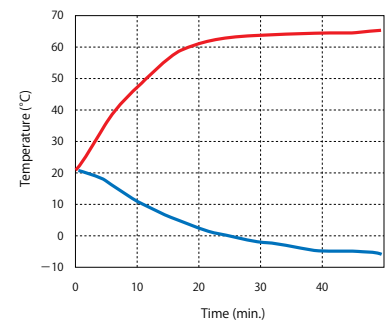
Unit: Wh

Comparison with IN804

- Condition : AC115V/50Hz, Room Temp 23°C, 5 shelves, no load
- Data was taken when each setting was stable

CO₂ emissions reduced by approx 1,269 kg
(Calculated for 1 year operation with 37°C setting)

Falling / Rising Temp. Curve

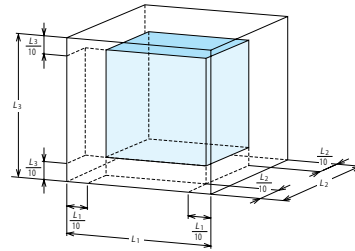


9 Point Temperature Distribution

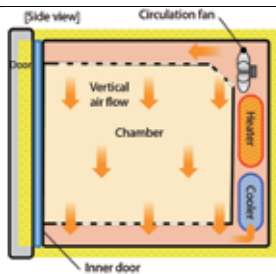
	Upper Front Left	Upper Back Left	Upper Front Right	Upper Back Right	Lower Front Left	Lower Back Left	Lower Front Right	Lower Back Right	Center Side	(°C)
No load	37.1	36.2	37.2	36.9	36.8	36.8	37.1	36.9	37.0	
Loaded	37.1	36.3	37.0	36.9	36.5	35.9	36.7	36.1	37.0	

Condition

- Above 9 measurement points were taken from the effective internal capacity down-scale by 10% (as the image on the right)
- Room Temp. 23°C, AC115V, 50Hz, Average temperature during stable setting temp. set at 37°C
- No Load condition: 5 shelves
- Loaded condition: each of the 12 shelves were loaded with 20 Petri Dishes (Total : 240 Petri Dishes)



Method



Control Panel



Overheat Prevention Device



External Output Terminal (Top: optional Bottom: standard)



Cable Port (I.D.Φ50mm standard)



Shelf & Bracket Set



Optional items

Description	Product code
(1) Stainless steel punched metal shelf up to 15kg	211221
(2) Stainless steel wire shelf up to 20kg	212918
(3) External alarm terminal*	211881
(4) Time-up output terminal*	211882
(5) Earthquake resistant fixture	211883

* (3) and (4) please specify when ordering main unit

Dimensions (mm)

