

Incubators

General Applications

General Incubators (refer to P. 20-21 IB-G, IB-E series)

- Cultivating thermophilic bacteria, germs and colon bacilli, microorganism, organism germs for life science, pharmacy, clinical science, chemistry, antibody testing, enzyme digestion, hematological testing, paraffin embedding, histochemical procedures, tissue culturing, crystallization studies, coliform determinations and biology.

Low Temperature Incubators:

High cooling performance by refrigerant (refer to P. 22-23 IL, IL-A series)

- Measuring COD/ BOD, cultivating low temperature microbes and plant cells, denaturalizing tests for food.
(Including above the general incubator applications)

Low Temperature Personal Incubators:

Peltier cooling device type (refer to P. 25 ILP series)

- Microorganism, organism germs for life science, pharmacy, clinical science, chemistry, antibody testing, paraffin embedding histochemical procedures, tissue culturing, crystallization studies, and biology.



Technical Benefits

Safety functions

- 1) Self-protecting cut-off function and signal:
 - For over temperature, automated cut the power supply for heater and controller orderly before the unit shuts down.
 - 2 separated over-current fuses for user safety.
 - 2) Time setting function for automated run/off:
 - Integrated time setting: Delayed ON/ OFF. (from 1 min to 99 hr 59 min)
 - Operating settable function: After a power interruption, select automated run or manual run.
 - 3) Door-open warning alarm:
 - Intermittent tone and optical signal alarm 5 min. after automated cut-off.
 - Heating element and fan automatically stop when door opening to minimize heat loss and protect operator.
- Frequently use 3 different temperatures memorable for convenient use.
 - Selectable measuring temperature in °C or °F
- 2) Applicable control display considering MMI (Man Machine Interface) network system:
 - Very similar key arrangement throughout the whole temperature chambers, bath circulators and shakers series.
 - Operator-friendly controller with the splash-proof/ easy-to-clean keypads and clear LED displays.
 - A speed lock key prevents accidental resetting of parameters conveniently.

Optimum control performance

- 1) Professional control electronics and program control:
 - Microprocessor PID temperature control with very simple calibration and auto-tuning features.
- ### Ideal construction
- 1) High quality 304 stainless steel inner chamber and dirt-repellent powder coating external surface.
 - 2) Perfectly sealed door gasket minimizes heat loss and fully insulated chambers keep exterior at a safe temperature.
 - 3) Adjustable stainless steel and electro polished wire shelves for better air-flowing and easy cleaning.

Selection Guide

Incubators

Description		Operating Temp. Range (°C/°F)	Chamber Volume (L / cu ft)	Temperature Fluctuation at 37°C[±°C/°F]	Temperature Variation at 37°C[±°C/°F]	Page
General Purpose	IB-05G	Amb. +5 to 70 /Amb. +9 to 158	60 / 2.1	0.1 / 0.18	0.6 / 1.08	20
	IB-15G		102 / 3.6		0.2 / 0.36	
	IB-25G		151 / 5.3		0.6 / 1.08	
Economy	IB-01E	Amb. +3 to 60 /Amb. +5.4 to 140	65 / 2.3	0.2 / 0.36	0.6 / 1.08	21
	IB-11E		150 / 5.3		0.8 / 1.44	
	IB-21E		205 / 7.2		1.1 / 1.98	

Low Temperature Incubators

Description		Operating Temp. Range (°C/°F)	Chamber Volume (L / cu ft)	Temperature Fluctuation at 25°C[±°C/°F]	Temperature Variation at 25°C[±°C/°F]	Page
Forced (Mechanical) Convection]	IL-11	0 to 60 /+32 to 140	150 / 5.3	0.1 / 0.18	0.5 / 0.9	22
	IL-21		224 / 8.6		0.4 / 0.72	
Natural (Gravity) Convection- Air Jacketed	IL-11A	+4 to 60 /+39.2 to 140	162 / 5.7	0.2 / 0.36	0.5 / 0.9	24
	IL-21A		254 / 9.0			
Personal (Compact)	ILP-02	5~40°C at ambient temperature 20°C	14 / 0.5	0.1 / 0.18	0.5 / 0.9	25
		10~40°C at ambient temperature 25°C				
	ILP-12	15~40°C at ambient temperature 30°C	48 / 1.7		0.4 / 0.72	

Accessories & Options

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Exclusive gravity convection type incubators for all laboratory purposes

IB-G series are the most useful incubators for general purpose which manufactured equipped *air-jacketed convection* style for excellent variation without outside air disturbances.

Operating features

- +5°C above room temperature to 70°C
- MicroprocessPID control/ Auto-tuning/ Calibration
- Digital timer: 1 min ~ 99 hr 59 min, delayed ON/ OFF
- Over-temperature limiter/ Door opening alarm
- 3 different temperature values memorable
- Digital LED display (0.1°C resolution) using touch-sensitive keypads
- RS-232 interface available

Constructional features

- Fully insulated dual-wall door with rubber magnetic seal gasket keeps setting temperature
- Stackable 2 steps up with exclusive stacking kits (optional)
- Optimized sample inspection through a tempered inner glass door without affecting chamber temperature
- Separable shelves and rounded inner chamber corners for easy cleaning
- Highly durable incoloy heating element with fins guarantee better radiation
- Connectable other electric instruments to the inside of a chamber through a side cable port
- Adjustable port to control the amount of airflow in the chamber (dia 38mm/1.5")



IB-05G

Included Accessories

- 2 wire shelves

Optional Accessories

- Perforated shelves [see page 15](#)
- Stacking kits for stackable chambers

Specifications & Ordering Informations



Model		IB-05G	IB-15G	IB-25G
Chamber Volume (L/cu ft)		60 / 2,1	102 / 3,6	151 / 5,3
Temperature	Range (°C/°F)	Amb. +5 to 70 / Amb. +9 to 158		
	Fluctuation ¹⁾ (± °C/°F) at 37°C	0,1 / 0,18	0,1 / 0,18	0,2 / 0,36
	Variation ¹⁾ (± °C/°F) at 37°C	0,6 / 1,08	0,2 / 0,36	0,6 / 1,08
Dimensions	Interior dimensions (W×D×H) (mm / inch)	400×360×420 / 15,7×14,2×16,5	480×410×520 / 18,9×16,1×20,5	310×460×540 / 24×18×21,3
	Exterior dimensions (W×D×H) (mm / inch)	595×555×745 / 23×22×29	675×605×855 / 27×24×34	805×655×885 / 32×26×35
	Net weight (Kg / lbs)	45 / 99	55 / 121	62 / 136
Electrical Requirements (230V)		50 / 60Hz, 1,3A	50 / 60Hz, 2,2A	50 / 60Hz, 3,1A
Cat. No.		AAH21162K	AAH21172K	AAH21182K
Electrical Requirements (120V)		50 / 60Hz, 2,8A	50 / 60Hz, 4,6A	50 / 60Hz, 6,4A
Cat. No.		AAH21166U	AAH21176U	AAH21186U

1) Technical data (according to DIN 12880)

Space saving design and dependable, trouble-free heating system

IB-E series completely wrap inner chambers in film type heaters that is perfectly safe from any mechanical vibration and noise, in addition to prevents frequent mechanical trouble.

Operating features

- +3°C above room temperature to 60°C
- Microprocess PID control/ Auto-tuning/ Calibration
- Digital timer: 1 min ~ 99 hr 59 min, delayed ON/ OFF
- Over-temperature limiter/ Door opening alarm
- 3 different temperature values memorable
- Digital LED display (0.1°C resolution) using touch-sensitive keypads

Constructional features

- Completely safe anti-vibration design is helpful to cultivate yeast and not to disturb nearly use of other instruments like a microscope
- Space saved dimension, lightweight and compact design with fully sealed gasket
- Stackable 2 steps up with exclusive stacking kits (optional)
- Optimized sample inspection through tempered inner glass door without affecting chamber temperature
- Separable shelves and rounded inner chamber corners for easy cleaning



IB-01E

Included Accessories

- 2 wire shelves

Optional Accessories

- Perforated shelves
- Stacking kits for stackable chambers

see page 15

Specifications & Ordering Informations



Model		IB-01E	IB-11E	IB-21E
Chamber Volume (L/cu ft)		65 / 2,3	150 / 5,3	205 / 7,2
Temperature	Range (°C/°F)	Amb. +3 to 60 / Amb. +5,4 to 140		
	Fluctuation ¹⁾ (± °C/°F) at 37°C	0,2 / 0,36	0,3 / 0,54	0,1 / 0,18
	Variation ¹⁾ (± °C/°F) at 37°C	0,6 / 1,08	0,8 / 1,44	1,1 / 1,98
Dimensions	Interior dimensions (W×D×H) (mm / inch)	423×355×445 / 16,7×14×17,5	500×515×585 / 19,7×20,3×23	632×515×630 / 24,9×20,3×24,8
	Exterior dimensions (W×D×H) (mm / inch)	533×475×725 / 21×18,7×28,5	595×630×865 / 23,5×24,8×34	740×630×910 / 29,1×24,8×35,8
	Net weight (Kg / lbs)	33	47	57
Electrical Requirements (230V)		50 / 60Hz, 1,1A	50 / 60Hz, 2,2A	50 / 60Hz, 2,4A
Cat. No.		AAH26015K	AAH26025K	AAH26035K
Electrical Requirements (120V)		50 / 60Hz, 2,1A	50 / 60Hz, 4,2A	50 / 60Hz, 4,6A
Cat. No.		AAH26016U	AAH26026U	AAH26036U

1) Technical data (according to DIN 12880)

Low Temperature Incubators



Go to **JEIO TECH .com**

Further information on Temperature Chamber products is readily available on our website.



〈IL-21 / IL-21A〉

Intensive low temperature incubating performance with compressor cooling system

IL series has an excellent HBP type compressor cooling system which is noiseless and reduces water-evaporation within the chamber.

► Operating features

- 0°C to 60°C
- Microprocess PID control/ Auto-tuning/ Calibration
- Digital timer: 1 min ~ 99 hr 59 min, delayed ON/ OFF
- Over-temperature limiter/ Door opening alarm
- 3 different temperature values memorable
- 9 steps of temperature profiles programmable and repeat up to 200 cycles
- Adjustable fan speed within 3 steps and defrosting time/ period control
- Digital LED display (0.1 °C resolution) using touch-sensitive keypads
- RS-232 interface available

► Constructional features

- Forced-air convection with an optimal cross flow type fan for excellent variation
- Enough capacity - large size of chambers with maximum 244L (8.6cu ft)
- One electrical outlet with safety cover allows use of other electric instruments in the chamber
- Optimized sample inspection through tempered inner glass door without affecting chamber temperature
- Separable shelves and rounded inner chamber corners for easy cleaning



IL-21

Included Accessories

- 2 wire shelves for IL-11
- 3 wire shelves for IL-21

Optional Accessories

- Perforated shelves [see page 15](#)

Specifications & Ordering Informations



Model		IL-11	IL-21
Chamber Volume (L/cu ft)		150 / 5.32	244 / 8.6
Refrigerator (Hp)		1/8 HBP	1/6 HBP
Temperature	Range (°C/°F)	0 to 60 / +32 to 140	
	Fluctuation ¹⁾ (± °C/°F) at 25°C	0.1 / 0.18	
	Variation ¹⁾ (± °C/°F) at 25°C	0.5 / 0.9	0.4 / 0.72
Dimensions	Interior dimensions (W×D×H) (mm / inch)	600×500×500 / 24.0×20.0×20.0	500×520×940 / 20.0×20.5×37.0
	Exterior dimensions (W×D×H) (mm / inch)	735×742×1010 / 28.9×29.0×40.0	635×740×1630 / 25.0×29.0×64.0
	Net weight (Kg / lbs)	100 / 220.0	135 / 297.0
Electrical Requirements (230V)		50 / 60Hz, 4.5A	50 / 60Hz, 6.4A
Cat. No.		AAH22042K / AAH22041K	AAH22052K / AAH22051K
Electrical Requirements (120V)		60Hz, 8.3A	60Hz, 10.6A
Cat. No.		AAH22046U	AAH22056U

1) Technical data (according to DIN 12880)

Exclusive air-jacketed convection type incubators prevent the inner chamber with excellent variation from outside air disturbance

IL-A series is perfectly safe from water-evaporations by evaporator of cooling system or blower, especially ideal for incubating test of an easily drying medium.

Operating features

- +4°C to 60°C
- Microprocess PID control/ Auto-tuning/ Calibration
- Digital timer: 1 min ~ 99 hr 59 min, delayed ON/ OFF
- Over-temperature limiter/ Door opening alarm
- 3 different temperature values memorable
- 9 steps of temperature profiles programmable and repeat up to 200 cycles
- Adjustable defrosting time/ period control
- Digital LED display (0.1°C resolution) using touch-sensitive keypads
- RS-232 interface available

Constructional features

- Air-jacketed type: outer heat exchange and inner gravity convection independently
- Enough capacity - large size of chambers with maximum 254L (9cu ft)
- One electrical outlet with safety cover allows use of other electric instruments in the chamber
- Optimized sample inspection through tempered inner glass door without affecting chamber temperature
- Separable shelves and rounded inner chamber corners for easy cleaning



IL-11A

Included Accessories

- 2 wire shelves for IL-11A
- 3 wire shelves for IL-21A

Optional Accessories

- Perforated shelves [see page 15](#)

Specifications & Ordering Informations



Model		IL-11A	IL-21A
Chamber Volume [L/cu ft]		162 / 5.7	254 / 9.0
Refrigerator [Hp]		1/6 HBP	1/4 HBP
Temperature	Range [°C/°F]	+4 to 60 / +39.2 to 140	
	Fluctuation ¹⁾ [± °C/°F] at 25°C	0.2 / 0.36	
	Variation ¹⁾ [± °C/°F] at 25°C	0.5 / 0.9	
Dimensions	Interior dimensions [W×D×H] (mm / inch)	600×540×500 / 24.0×21.3×20.0	500×540×940 / 20.0×21.3×37.0
	Exterior dimensions [W×D×H] (mm / inch)	770×772×1060 / 30.0×30.0×42.0	670×760×1680 / 26.0×30.0×66.0
	Net weight [Kg / lbs]	108 / 238.1	145 / 319.7
Electrical Requirements [230V]		50 / 60Hz, 6.6A	50 / 60Hz, 8.0A
Cat. No.		AAH22062K / AAH22061K	AAH22072K / AAH22071K
Electrical Requirements [120V]		60Hz, 10.2A	60Hz, 12.3A
Cat. No.		AAH22063U	AAH22073U

1) Technical data (according to DIN 12880)

Compact, lightweight with exclusive incubating performance for valuable tests

ILP series has a thermal electric module-Peltier cooled type which is very quiet, anti-vibration and small generation of heat to just fit a bench-top personal incubator!

Operating features

- +5°C to 40°C at room temperature 25°C
- Microprocess PID control/ Auto-tuning/ Calibration
- Digital timer: 1 min ~ 99 hr 59 min, delayed ON/ OFF
- Over-temperature limiter
- 3 different temperature values memorable
- 9 steps of temperature profiles programmable and repeat up to 200 cycles
- Adjustable fan speed within 3 steps and defrosting time/ period control
- Digital LED display (0.1°C resolution) using touch-sensitive keypads
- RS-232 interface available

Constructional features

- Tempered inner glass door is equipped for all models! (14L/ 48L)
- Maximum 2 X 1000mL Erlenmeyer flasks can be stored in the smallest chamber (14L)
- Environment-friendly insulation material-EPDM used for safe and convenient operating (ASTM-C534)
- Space-saving compact size on bench-top and can simply be stacked up



ILP-02 stackable chambers

Included Accessories

- 1 wire shelf for ILP-02
- 2 wire shelves for ILP-12

Optional Accessories

- Perforated shelves [see page 15](#)

Specifications & Ordering Informations



Model		ILP-02	ILP-12
Chamber Volume [L/cu ft]		14 / 0.5	48 / 1.7
Temperature	Range (°C/°F)	5~40°C (41~104°F) at ambient temperature 20°C	
		10~40°C (50~104°F) at ambient temperature 25°C	
		15~40°C (59~104°F) at ambient temperature 30°C	
	Fluctuation ¹⁾ [± °C/°F] at 25°C	0.1 / 0.18	
Dimensions	Variation ¹⁾ [± °C/°F] at 25°C	0.5 / 0.9	
		0.4 / 0.72	
		315×200×230 / 12.4×7.9×9.1	
	Interior dimensions [W×D×H] (mm / inch)	334×334×430 / 13.1×13.1×17.0	
Dimensions	Exterior dimensions [W×D×H] (mm / inch)	430×495×400 / 17.0×19.4×15.7	
		430×665×620 / 17.0×26.2×24.4	
		27.5 / 60.6	
	Net weight [Kg / lbs]	49 / 108.0	
Electrical Requirements [230V]		50 / 60Hz, 1.8A	50 / 60Hz, 3.5A
Cat. No.		AAH24032K / AAH24031K	AAH24042K / AAH24041K
Electrical Requirements [120V]		60Hz, 3.4A	60Hz, 6.7A
Cat. No.		AAH24033U	AAH24043U

1) Technical data (according to DIN 12880)