Incubator (Air-jacket)
Advanced type



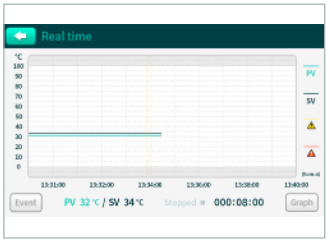
IB4-15AV

Intuitive Large Touch Controller

- Intuitive interface with 5-inch display
- Events and alerts in a single view with real-time graph
- Three frequent temperatures automatically suggested
- 'Wait on / Wait off' timer function



Large intuitive display



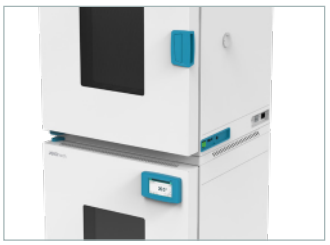
Graphs for real-time process monitoring

Unique Structural Functions

- Using Water tray delays media drying, making incubation time longer (option)
- Double stackable with stacking set (option) maximizes space utilization



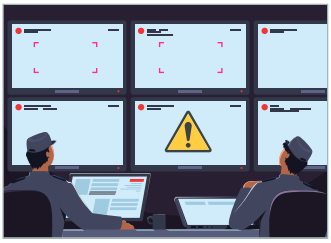
Water tray that minimizes media drying (option)



Increased space utilization by double stacking (stacking set : option)
*Double stacking example: (top) forced convection oven (bottom) forced convection incubator

Supervise Equipment with Real-time Monitoring

- Monitor the temperature on BMS (Building Management System) for quick responses to abnormalities. (option)
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)



Timely responses via BMS-connected monitoring (BMS port: option)



Real-time monitoring via mobile devices (LC GreenBox: option)

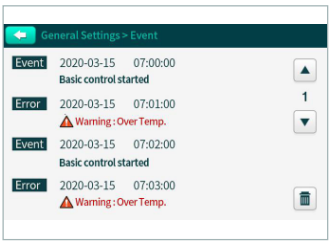
CE | RoHS Compliant | FDA 21 CFR Part 11 Compliance | LC Connected | Touch Display | USB Data Save | Real-time Graph | Safety Patented | Temperature Calibration | Deviation Warning | Over Temp. | Timer | Computer Interface | Auto Run | 2 year Warranty

Convenient Experiment and Data Checking

- Support RS-232/USB port and software making easy operation and data management from PC
- Test data are automatically stored and easily exported via USB; easy to edit data (in CSV format)
- Logs 36 recent events, including errors, opened door, etc
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



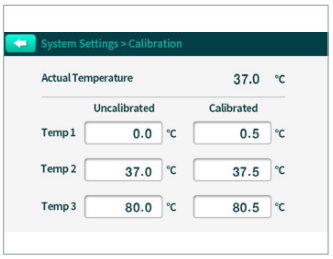
Data storage using USB ports



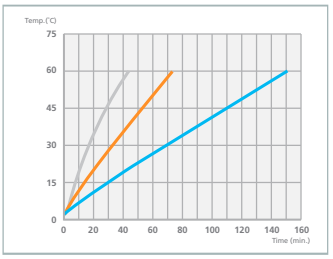
Store recent 36 events

Reliable Temperature Control Performance

- Temperature accuracy for wide range by 3-point calibration
- Ramp Control™, function that controls the rate of temperature rise by setting ramping rate(°C/min) per experiment
- Uniform temperature distribution through airflow optimized for uniform heat transfer (within ±0.55°C at 37°C)



Accurate temperature control with 3-point calibration



Ramp Control™ per experiment condition

Specification

Model		IB4-03AV	IB4-05AV	IB4-10AV	IB4-15AV
Chamber volume (L / cu ft)		25 / 0.88	60 / 2.19	114 / 4.03	150 / 5.3
Temperature	Range (°C / °F)	Amb.+5 ~ 80°C / Amb.+9 ~ 176°F			
	Fluctuation at 37°C (°C / °F)	±0.1 / ±0.18	±0.1 / ±0.18	±0.15 / ±0.27	±0.1 / ±0.18
	Variation at 37°C (°C / °F)	±0.31 / ±0.56	±0.48 / ±0.86	±0.46 / ±0.83	±0.55 / ±0.99
	Heating time to 37°C (min.)	44	40	46	49
	Recovery time at 37°C (min.)	5	9	9	9
Control panel		5 inch TFT Color LCD			
Communication interface		USB-B, RS-232			
Function	Recently event record	36 ea			
	Recommended temperature	Suggest three frequently used temperature			
	Graph	Available viewing stored and real-time graphs			
	Data storage	Save your experiment data (in CSV format)			
	Temp. ramping rate (°C/min. | °F/min)	0 ~ 2 | 0 ~ 3.6			
Dimensions	Interior (W x D x H, mm / inch)	300 x 210 x 400 / 11.81 x 8.27 x 15.75	380 x 330 x 480 / 14.96 x 12.99 x 18.9	485 x 350 x 655 / 19.1 x 13.78 x 25.79	550 x 376 x 710 / 21.62 x 14.8 x 27.95
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.75 x 23.78	558 x 648 x 684 / 21.97 x 25.5 x 26.93	663 x 677 x 859 / 26.1 x 26.65 x 33.82	728 x 704 x 914 / 28.66 x 27.7 x 36.0
	Net weight (kg / lbs)	31 / 68.34	40 / 88.18	55 / 121.25	60 / 132.28
Shelves	Quantity of shelves (standard/max.)	2 / 4	2 / 5	2 / 8	2 / 9
	Max. Load per shelf (kg / lbs)	20 / 44.09			
Electrical requirements (230V, 50/60Hz, A)		2.5	3.5	3.5	3.5
Cat. No.		**AAH21755K**	**AAH21765K**	**AAH21775K**	**AAH21785K**
Electrical requirements (120V, 60Hz, A)		4.8	6.7	6.7	6.7
Cat. No.		**AAH21753U**	**AAH21763U**	**AAH21773U**	**AAH21783U**

※ Technical data according to DIN 12880

Accessories Page 107

Wire Shelf, Perforated Shelf, Stacking set, BMS Port, LC GreenBox, LC DataKeeper

Incubator (Air-jacket)
Standard type



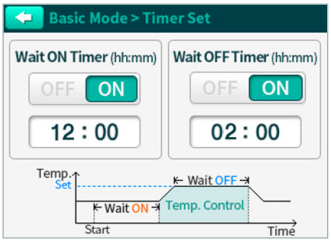
IB4-15AS

Intuitive Touch Controller

- Intuitive interface with 3.5-inch display
- 'Wait on / Wait off' timer function



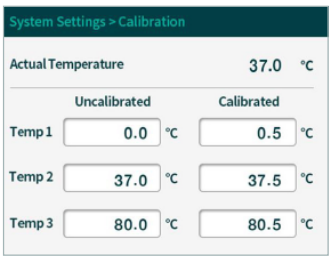
3.5-inch touch display



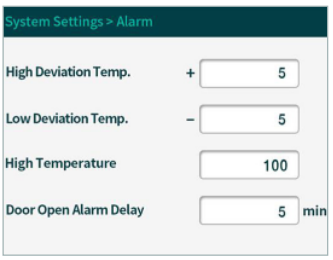
Wait on & Wait off timer

Reliable Temperature Control Performance

- Temperature accuracy for wide range by 3-point calibration
- The upper and lower temperature limits can be set, enabling alerts for deviations to trigger quick actions
- Uniform temperature distribution through airflow optimized for uniform heat transfer (within ±0.55°C at 37°C)



Accurate temperature control with 3-point calibration



Settings for temperature deviation

Convenient Experiment and Data Checking

- Support RS-232/USB port and software making easy operation and data management from PC (option)
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Monitor the temperature on BMS (Building Management System) for quick responses to abnormalities. (option)
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



Manipulation via PC (option)



Real-time monitoring via mobile devices (LC GreenBox: option)

CE | RoHS Compliant | FDA 21 CFR Part 11 Compliance | LC Connected | Touch Display | Safety Patented | 3 Points Temperature Calibration | Deviation Warning | Over Temp. | Timer | Computer Interface | Auto Run | 2 year Warranty

Enhanced Safety and Convenience

- Implemented with the highest-level overheating prevention system (Patented in Korea)
- Over Temperature Limiter
- Complaint to IEC Class II protection standards and temperature protection in line with DIN 12880 Class 3.1
- Logs the last 12 events, including run times, stops, and errors
- Double stackable with stacking set (option) maximizes space utilization



Logs the recent 12 events



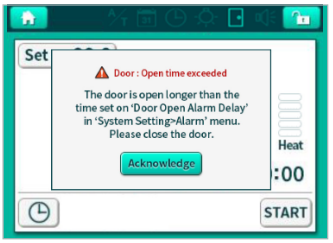
Increased space utilization by double stacking (stacking set : option)
*Double stacking example: (top) forced convection oven (bottom) forced convection incubator

Multiple Features to Minimize Incubation Failure

- Using Water tray delays media drying, making incubation time longer (option)
- Automatically resume the control of previous operations when restored within 30 seconds from blackouts
- Controller can be locked with the button on the top, preventing any actions from unintended pressing
- Abnormalities are notified with audiovisual alerts to trigger quick actions



Water tray that minimizes media drying (option)



Audiovisual alerts to notify abnormalities

Specification

Model		IB4-03AS	IB4-05AS	IB4-10AS	IB4-15AS
Chamber volume (L / cu ft)		25 / 0.88	60 / 2.19	114 / 4.03	150 / 5.3
Temperature	Range (°C / °F)	Amb.+5 ~ 80°C / Amb.+9 ~ 176°F			
	Fluctuation at 37°C (°C / °F)	±0.1 / ±0.18	±0.1 / ±0.18	±0.15 / ±0.27	±0.1 / ±0.18
	Variation at 37°C (°C / °F)	±0.31 / ±0.56	±0.48 / ±0.86	±0.46 / ±0.83	±0.55 / ±0.99
	Heating time to 37°C (min.)	44	40	46	49
	Recovery time at 37°C (min.)	5	9	9	9
Control panel		3.5 inch TFT Color LCD			
Communication interface		USB-B, RS-232 (option)			
Function	Recently event record	12 ea			
Dimensions	Interior (W x D x H, mm / inch)	300 x 210 x 400 / 11.81 x 8.27 x 15.75	380 x 330 x 480 / 14.96 x 12.99 x 18.9	485 x 350 x 655 / 19.1 x 13.78 x 25.79	550 x 376 x 710 / 21.62 x 14.8 x 27.95
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.75 x 23.78	558 x 648 x 684 / 21.97 x 25.5 x 26.93	663 x 677 x 859 / 26.1 x 26.65 x 33.82	728 x 704 x 914 / 28.66 x 27.7 x 36.0
	Net weight (kg / lbs)	31 / 68.34	40 / 88.18	55 / 121.25	60 / 132.28
Shelves	Quantity of shelves (standard/max.)	2 / 4	2 / 5	2 / 8	2 / 9
	Max. Load per shelf (kg / lbs)	20 / 44.09			
Electrical requirements (230V, 50/60Hz, A)		2.5	3.5	3.5	3.5
Cat. No.		**AAH21555K**	**AAH21565K**	**AAH21575K**	**AAH21585K**
Electrical requirements (120V, 60Hz, A)		4.8	6.7	6.7	6.7
Cat. No.		**AAH21553U**	**AAH21563U**	**AAH21573U**	**AAH21583U**

※ Technical data according to DIN 12880

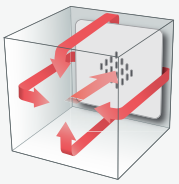
Accessories Page 107

Wire Shelf, Perforated Shelf, Stacking set, BMS Port, LC GreenBox, LC DataKeeper

Incubator (Forced Convection), Advanced type







Airflow

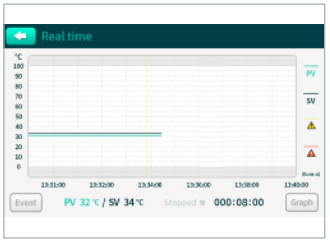
IB4-15V

Intuitive Large Touch Controller

- Intuitive interface with 5-inch display
- Events and alerts in a single view with real-time graph
- Three frequent temperatures automatically suggested
- 'Wait on / Wait off' timer function



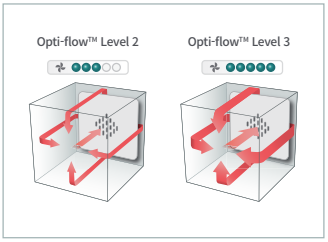
Large intuitive display



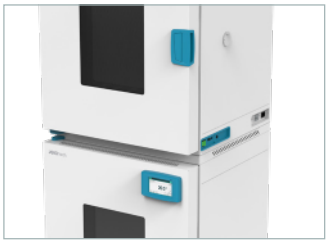
Graphs for real-time process monitoring

Unique Structural Functions

- Opti-flow™, the fan speed control function based on sample and testing conditions
- Double stackable with stacking set (option) maximizes space utilization



Minimize media drying with Opti-flow™

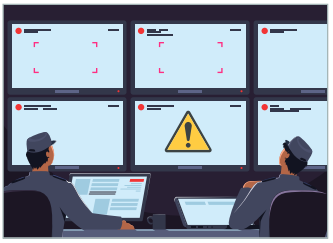


Increased space utilization by double stacking (stacking set : option)

*Double stacking example: (top) forced convection oven (bottom) forced convection incubator

Supervise Equipment with Real-time Monitoring

- Monitor the temperature on BMS (Building Management System) for quick responses to abnormalities (option)
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)



Timely responses via BMS-connected monitoring (BMS port: option)



Real-time monitoring via mobile devices (LC GreenBox: option)

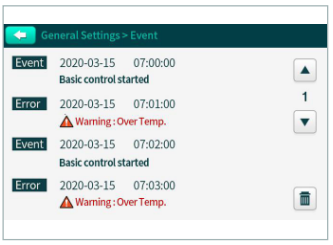
CE | RoHS Compliant | FDA 21 CFR Part 11 Compliance | LC Connected | Touch Display | USB Data Save | Real-time Graph | Safety Patented | 3 Points Temperature Calibration | Deviation Warning | Over Temp. | Timer | Computer Interface | Auto Run | 2 year Warranty

Convenient Experiment and Data Checking

- Support RS-232/USB port and software making easy operation and data management from PC
- Test data are automatically stored and easily exported via USB; easy to edit data (in CSV format)
- Logs 36 recent events, including errors, opened door, etc
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



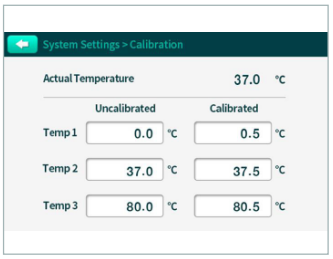
Data storage using USB ports



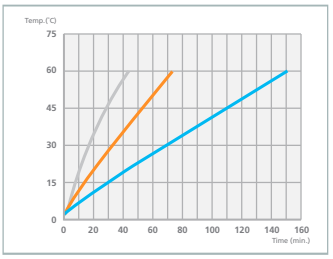
Store recent 36 events

Reliable Temperature Control Performance

- Temperature accuracy for wide range by 3-point calibration
- Ramp Control™, function that controls the rate of temperature rise by setting ramping rate(°C/min) per experiment
- Uniform temperature distribution through airflow optimized for uniform heat transfer (within ±0.41°C at 37°C)



Accurate temperature control with 3-point calibration



Ramp Control™ per experiment condition

Specification

Model		IB4-03V	IB4-05V	IB4-10V	IB4-15V
Chamber volume (L / cu ft)		25 / 0.88	60 / 2.12	111 / 3.92	146 / 5.16
Temperature	Range (°C / °F)	Amb.+5[1] ~ 80°C / Amb.+9 ~ 176°F			
	Fluctuation at 37°C (°C / °F)	±0.1 / ±0.18	±0.15 / ±0.27	±0.1 / ±0.18	±0.1 / ±0.18
	Variation at 37°C (°C / °F)	±0.23 / ±0.41	±0.41 / ±0.74	±0.39 / ±0.70	±0.35 / ±0.63
	Heating time to 37°C (min.)	5	4	8	7
	Recovery time at 37°C (min.)	5	4	4	3
Control panel		5 inch TFT Color LCD			
Communication interface		USB-B, RS-232			
Function	Recently event record	36 ea			
	Recommended temperature	Suggest three frequently used temperature			
	Graph	Available viewing stored and real-time graphs			
	Data storage	Save your experiment data (in CSV format)			
	Temp. ramping rate (°C/min. | °F/min)	0 ~ 8 | 0 ~ 14.4	0 ~ 6 | 0 ~ 10.8	0 ~ 5 | 0 ~ 9	0 ~ 4 | 0 ~ 7.2
Dimensions	Interior (W x D x H, mm / inch)	300 x 210 x 400 / 11.81 x 8.27 x 15.75	380 x 330 x 480 / 14.96 x 12.99 x 18.9	485 x 350 x 655 / 19.1 x 13.78 x 25.79	550 x 376 x 710 / 21.62 x 14.8 x 27.95
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.75 x 23.78	558 x 648 x 684 / 21.97 x 25.5 x 26.93	663 x 677 x 859 / 26.1 x 26.65 x 33.82	728 x 704 x 914 / 28.66 x 27.7 x 36.0
	Net weight (kg / lbs)	32 / 70.55	41 / 90.39	56 / 123.46	62 / 136.69
Shelves	Quantity of shelves (standard / max.)	2 / 4	2 / 5	2 / 8	2 / 9
	Max. Load per shelf (kg / lbs)	20 / 44.09			
Electrical requirements (230V, 50/60Hz, A)		3			
Cat. No.		**AAH21655K**	**AAH21665K**	**AAH21675K**	**AAH21685K**
Electrical requirements (120V, 60Hz, A)		5.8			
Cat. No.		**AAH21653U**	**AAH21663U**	**AAH21673U**	**AAH21683U**

1) Able to control down to amb +5°C(amb +9°F) when the water tray is filled with water. (Water tray: option)
※ Technical data according to DIN 12880

Accessories Page 107

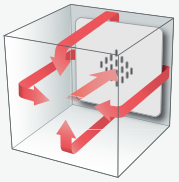
Wire Shelf, Perforated Shelf, Stacking set, BMS Port, LC GreenBox, LC DataKeeper

Incubator (Forced Convection), Standard type





21 CFR Part 11 FDA Compliance



Airflow

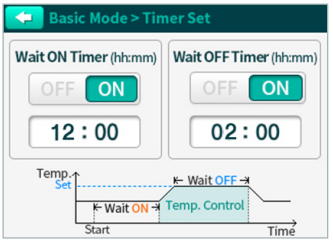
IB4-15S

Intuitive Touch Controller

- Intuitive interface with 3.5-inch display
- 'Wait on / Wait off' timer function



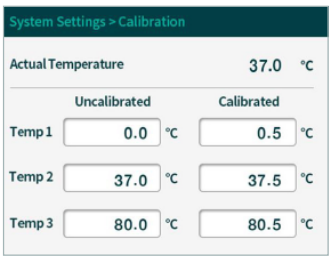
3.5-inch touch display



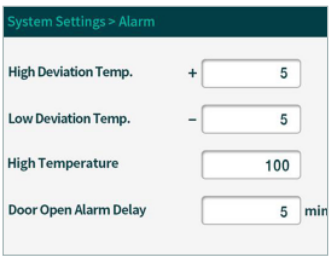
Wait on & Wait off timer

Reliable Temperature Control Performance

- Temperature accuracy for wide range by 3-point calibration
- The upper and lower temperature limits can be set, enabling alerts for deviations to trigger quick actions
- Uniform temperature distribution through airflow optimized for uniform heat transfer (within ±0.41°C at 37°C)



Accurate temperature control with 3-point calibration



Settings for temperature deviation

Convenient Experiment and Data Checking

- Support RS-232/USB port and software making easy operation and data management from PC (option)
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Monitor the temperature on BMS (Building Management System) for quick responses to abnormalities. (option)
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



Manipulation via PC (option)



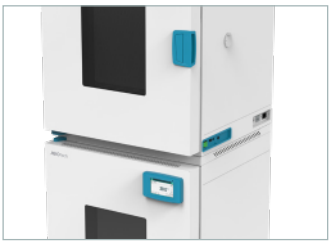
Real-time monitoring via mobile devices (LC GreenBox: option)

Enhanced Safety and Convenience

- Implemented with the highest-level overheating prevention system (Patented in Korea)
- Over Temperature Limiter
- Complaint to IEC Class II protection standards and temperature protection in line with DIN 12880 Class 3.1
- Logs the last 12 events, including run times, stops, and errors
- Double stackable with stacking set (option) maximizes space utilization



Logs the recent 12 events



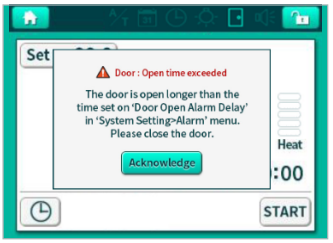
Increased space utilization by double stacking (stacking set : option)
*Double stacking example: (top) forced convection oven (bottom) forced convection incubator

Multiple Features to Minimize Incubation Failure

- Using Water tray delays media drying, making incubation time longer (option)
- Alarm is activated when door remains open longer than the set time to maintain internal temperature
- Automatically resume the control of previous operations when restored within 30 seconds from blackouts
- Controller can be locked with the button on the top, preventing any actions from unintended pressing



Water tray that minimizes media drying (option)



Audiovisual alerts to notify abnormalities

Specification

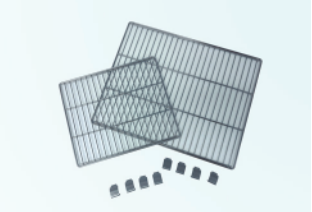
Model		IB4-03S	IB4-05S	IB4-10S	IB4-15S
Chamber volume (L / cu ft)		25 / 0.88	60 / 2.19	111 / 3.92	146 / 5.16
Temperature	Range (°C)	Amb.+5[1] ~ 80°C / Amb.+9 ~ 176°F			
	Fluctuation at 37°C (°C / °F)	±0.1 / ±0.18	±0.15 / ±0.27	±0.1 / ±0.18	±0.1 / ±0.18
	Variation at 37°C (°C / °F)	±0.23 / ±0.41	±0.41 / ±0.74	±0.39 / ±0.70	±0.35 / ±0.63
	Heating time to 37°C (min.)	5	4	8	7
	Recovery time at 37°C (min.)	5	4	4	3
Control panel		3.5 inch TFT Color LCD			
Communication interface		USB-B, RS-232 (option)			
Function	Recently event record	12 ea			
Dimensions	Interior (W x D x H, mm / inch)	300 x 210 x 400 / 11.81 x 8.27 x 15.75	380 x 330 x 480 / 14.96 x 12.99 x 18.9	485 x 350 x 655 / 19.1 x 13.78 x 25.79	550 x 376 x 710 / 21.62 x 14.8 x 27.95
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.75 x 23.78	558 x 648 x 684 / 21.97 x 25.5 x 26.93	663 x 677 x 859 / 26.1 x 26.65 x 33.82	728 x 704 x 914 / 28.66 x 27.7 x 36.0
	Net weight (kg / lbs)	32 / 70.55	41 / 90.39	56 / 123.46	62 / 136.69
Shelves	Quantity of shelves (standard/max.)	2 / 4	2 / 5	2 / 8	2 / 9
	Max. Load per shelf (kg / lbs)	20 / 44.09			
Electrical requirements (230V, 50/60Hz, A)		3			
Cat. No.		**AAH21455K**	**AAH21465K**	**AAH21475K**	**AAH21485K**
Electrical requirements (120V, 60Hz, A)		5.8			
Cat. No.		**AAH21453U**	**AAH21463U**	**AAH21473U**	**AAH21483U**

1) Able to control down to amb +5°C(amb +9°F) when the water tray is filled with water. (Water tray: option)
※ Technical data according to DIN 12880

Accessories Page 107

Wire Shelf, Perforated Shelf, Stacking set, BMS Port, LC GreenBox, LC DataKeeper

Accessories for Incubator



Wire Shelf
(2 shelves included as standard)
- Stainless Steel
- Uniform temperature distribution based on high air permeability



Perforated Shelf
- Stainless Steel
- Robust structure is ideal for heavy load samples



Recorder (Dot)
- 6-channel graph-type temperature recorder.
- Adjustable recording range, speed, etc.



CO_2 Control System
- CO_2 control system for optimal photosynthetic conditions (Sensor, PCB, Valve, etc)

Model	Wire Shelves		Perforated Shelves		Recorder	CO_2 Control System
	Cat. No.	Quantity of shelves (standard/max.)	Cat. No.	Quantity of shelves (max.)	Cat. No.	Cat. No.
IB4-03	00FDA0009739	2 / 4	AAA125341	4	-	-
IB4-05	00FDA0009738	2 / 5	AAA125342	5	-	-
IB4-10	00FDA0009737	2 / 8	AAA125343	8	-	-
IB4-15	00FDA0009736	2 / 9	AAA125344	9	-	-
IM-10	00EDA0008244	2 / 4	AAA24511	4	-	-
IB-02G-2C/4C[1)]	00EDA0008136	2 / 4	AAA12531	4	-	-
ILP-02	00EDA0008223	1 / 6	AAA24501	6	-	-
ILP-12	00EDA0008221	2 / 13	AAA24502	13	-	-
IL3-15/15A	00EDA0008219	2 / 6	AAA22521	6	-	-
IL3-25/25A	00EDA0008220	3 / 13	AAA22522	13	-	-
IL-11-2C/4C[1)]	00EDA0008219	2 / 12	AAA12532	12	-	-
GC-300TL	00EDA0008220	3 / 14	AAA22522	14	AAAA1501	AAAA1521
GC-300TLH	00EDA0008220	3 / 14	AAA22522	14	AAAA1501	AAAA1521
GC-1000TLH	00EDA0008222	6 / 29	AAAA1512	29	AAAA1502	AAAA1521

1) Standard for each chamber



LC DataKeeper
- High-integrity software compliant with FDA 21 CFR Part 11
- Integrated with Jeio Tech equipment to undergo GMP audits



LC GreenBox
- Real-time monitoring and control via mobile app
- Connect up to 4 devices to one
- Communication port connectivity via a RS-232 port



BMS Port
- Real-time equipment monitoring from a central monitoring facility
- Useful for safety management at laboratories that operate multiple devices



Stacking Set (-05 / -15 models only)
- Double stackable
- Firm stacking allows efficient utilization of space

(※ When double stacking, the minimum control temperature of the upper chamber may be limited due to the heat generated by the lower chamber)

Model	IB4-03	IB4-05	IB4-10	IB4-15
LC DataKeeper-Basic[1)]	SSA11001			
LC DataKeeper-Pro[1)]	SSA11002			
LC GreenBox	AAHQ1011K			
BMS Port	AAA125534			
Stacking Set	-	AAA125547	-	AAA125549
Water Tray	AAA125443	AAA125444	AAA125445	AAA124554
Communication Port[2)]	AAA125533			

1) Trial version is available for 30 days, offering the same features as the Basic version, and can be requested through the website.
2) Communication port is provided as a standard in advanced (-V) model and is an optional add-on for the basic (-S) model for connecting LC DataKeeper, LC GreenBox, BMS, and PC.