AEOLUS™ IS-18CA/IS-18A and IS-18C5A/IS-18B5A Stackable CO2/Non-CO2 Incubator Shakers

NEW! 50mm Orbit Available!



Crystalindustries.com | Info@crystalindustries.com | 972-934-2525

The CO2 Incubator Shaker features Temperature, Shaking, CO2 Concentration, and Humidity controls. Its stackable design helps maximize floor space, with the capability to stack up to three units high.



Innovative Design

- Three axis eccentric balance system provides stable and reliable shaking
- Terminal feedback system ensures precise shaking speed
- Brushless DC motor is highly efficient, quiet, durable, and produces negligible heat that does not affect the chamber temperature
- Combination of Proportional-Integral-Derivative control and Fuzzy control for temperature ensure temperature accuracy within ±0.1°C
- Program mode allows user to set up to 12 segments of varying temperature and speed



WiFi and RS485 monitoring and control allows the user to stay in touch with the instrument even outside of the lab

PRODUCT FEATURES

- 7" High-Res Color Touch Screen with intuitive graphic interface
- Chamber design features smooth rounded internal corners for easy cleaning
 Capacity is 6 x 5L Erlenmeyer
- shaker flasks
- Infra-Red(IR) CO2 sensor for precise and reliable CO2 detection
- Optional WiFi and RS485
- Definition of the and R3485 monitoring and control
 2 Sets of UV lights for easy sterilization
- Audible and visual alarms
- Mirror finish, pharmaceutical grade stainless steel chamber
 Stackable design up to 3
- units.
- 25mm and 50mm orbit models available
- Highly efficient inverter compressor refrigeration allows for temperatures as low as 20°C below room temperature with low energy consumption (minimum temperature is 4°C)
- Infrared CO2 sensor provides accurate and reliable CO2 detection (IS-18CA/ IS-18C5A only)
- Intuitive 7" capacitive touchscreen makes functions, such as setting alarm parameters, easy to complete
- Slide rail platform makes it easy to load and unload fixtures
- Noise reduction design keeps the instrument noise level to 55 dB
- Polyurethane foam insulation provides excellent thermal insulation.

CAPACITIVE TOUCH SCREEN DISPLAY



Main Interface:

- 1. Displays the current instrument status.
- 2. Light button: Press to turn the light on or off.
- 3. Displays the current function's running status, orbit diameter (for speed), and any alarms.
- 4. Plus and Minus buttons: Adjusts the corresponding function's value.
- 5. Displays the set value and allows user to manually input the set value.
- 6.Run/Stop button: Runs and stops function.
- 7. Edit button for programmable mode: Sets up to 12 running segments of varying temperatures and speed.
- 8. Running mode button: Switches between "Easy" and "Program Control" mode.
- 9.Run/Stop all button: Runs and stops all functions.
- 10. Main Settings button: Enters settings page (image below), which features specific settings for the user to edit.
- 11. Function icon buttons: Graphically displays the real-time function data.

Control Features

- Powerful Data storage: Data is stored for more than 2 years. Recorded in 1 minute intervals.
- Real-time data view: On the display, operator can view the running data from latest 7 days.
- Data export: Easily export more than 2 years (912 days) of parameter data via USB.
- Remote WiFi / Ethernet monitoring accessory and smart phone app enable remote monitoring and control.
- Various Alarms: Alarms can be armed to activate when parameter values deviate outside of users set bounds.
- Alarm recording: Alarm information is stored and viewable.
- Easy Calibration: Calibrating functions only require inputting the difference between set and actual values.



<u>AEOLUS™ IS-18CA/IS-18A AND</u> <u>IS-18C5A/IS-18B5A STACKABLE</u> <u>CO2/NON-CO2 INCUBATOR SHAKERS</u>

OVERVIEW

- High Resolution 7-inch Color Touch Screen: Modular display presents instrument status and function values in a clear and concise manner.
- **Capacitive Touch Screen**: The capacitive screen is more responsive and durable than a resistance screen as there is no reaction delay when the screen is pressed.
- Large Capacity: The chamber can hold up to 6 x 5L Erlenmeyer shaker flasks.
- **Pull Out Rail Platform**: Operators can easily pull the platform out to load or unload fixtures. Only one locking handle in the middle of the platform makes the process fast and convenient.
- **Excellent Temperature Control Performance**: When the incubator is at a stable temperature of 37°C, the uniformity is ±0.2°C.
- Strong Cooling Capacity: The incubator chamber can be cooled to 20°C below the ambient temperature (Lowest temp is 4°C).
- **Inverter Compressor**: Makes cooling a noiseless, durable, and highly efficient process while also saving energy.
- Three Units Can Be Stacked: This product can be purchased as a single, double, or triple stack.
- **Bi-Directional Ultraviolet Sterilization**: The chamber is equipped with two sets of UV sterilization light components to enhance the germicidal irradiation effect and reach all areas of the chamber.
- Ultra Quiet Design: The noise level is less than 55dB when incubator is running and cooling (loudest process), providing a quiet environment for the operator.
- **Slow Acceleration and Deceleration**: Shaking function starts and stops slowly to prevent large shear forces on the bacteria or cells.
- High Pressure Water Rinse: Both the platform and chamber feature an integrated draining system that is fast and efficient.
- Efficient, Durable, and Light-Weight Insulation: Polyurethane foam insulation provides advanced thermal insulation. The material is also air-tight, waterproof, lightweight, shockproof, electrically insulated, heat resistant, cold resistant, and solvent resistant.

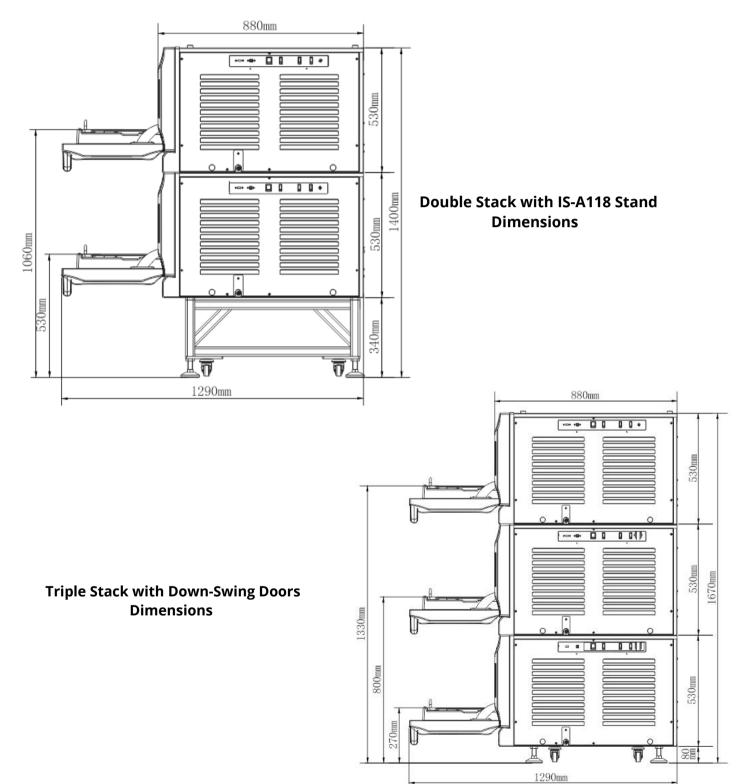


PRODUCT SPECIFICATIONS

Product Name Shaker Shaker Common of the image o	Model	IS-18A	IS-18B5A	IS-18CA	IS-18C5A	
Stater Stater<	Product Name				AEOLUS™ CO2 Incubator	
Max Capacity Clamp capacity.25/mit.13/4 / 15/mit.13/4 / 15/mit.13/6 / 15/mit.16/0 / 25/mit.27 Max Capacity Capacity with Sticky Matr. 25/mit.13/7 / 15/mit.13/7 / 15/mit.13/6 / 25/mit.13/7 / 15/mit.13/6 / 25/mit.13/6 /		Shaker	, ,		Shaker (50mm orbit)	
Max Capacity 1000mLx22 / 2000mLx15 / 5000mLX16 / 200mLx12 / 250mLx37 Capacity with Sick Mats: 25mLx17 / 50mLx16 / 200mLx15 / 5000mLX15 / 5000mLX16 / 5000mLX15 / 5000mLX16	Platform Dimensions WxD					
Max Load 20 kg (44.1 b) Temperature Range Room Temp. Minus 20°C-60°C (Lowest Temp is 4°C) Temperature Accuracy 4.0.2°C (@ 37°C) Temperature Stability ± 0.2°C (@ 37°C) Temperature Stability ± 0.2°C (@ 37°C) Temperature Stability ± 0.2°C (@ 37°C) Speed Accuracy sfmin (@ 37°C) Speed Accuracy ± 0.2°C (@ 37°C) Orbit Diameter @ 25mm (01.01) @ 50mm (02.1 n) Orbit Diameter @ 25mm (01.01) @ 50mm (02.1 n) CO2 Control Range NA 0-20% CO2 Control Range NA 9.0°0%) CO2 Control Range NA 9.0°0%) CO2 Control Range NA 9.0°0%) Relative Humidity Type NA 9.0°0% Max Humidity NA 9.0°0% Programmable Segments 12 Segments 12 Segments Timer 0-909Mr S9min 900 KG 03 308mm Iternal Working Dimensions 900 555 (1-800m w) (led) Imm Disinfection Down-Swing (Optional up-swing door for toru unil of triple stack) Inter	Max Capacity *	1000mLx22 / 2000mLx15 / 5000mL(Shaker Flask)x6 Capacity with Sticky Mats: 25mLx187 / 50mLx187 / 100mLx112 / 150mLx104 / 200mLx84 / 250mLx76 /				
Temperature Range Room Temp. Minus 20°0-60°C (Lowest Temp is 4°C) Temperature Accuracy ±0.1°C (@37°C) Temperature Stability ± 0.2°C (@37°C) Temperature Stability ± 0.2°C (@37°C) Temperature Stability ± 0.2°C (@37°C) Speed 0(stop), 30-300 RPM Speed Accuracy ± 1 RPM Orbit Diameter Ø25mm (Ø1.0in) Ø50mm (Ø2 in) CO2 Control Range NA 0-20% CO2 Control Range NA 0-20% CO2 Control Range NA 50.1% Opened for 30s NA \$60mm (@2 in) Opened for 30s NA \$60mm (@2 in) Opened for 30s NA \$60mm (@2 in) CO2 Control Range NA \$60mm (@2 in) CO2 Control Range NA \$60mm (@2 in) CO2 Control Range NA \$60mm (@2 in) Diffection NA \$60mm (@2 in) Timer 0-9090F 59min \$10mminution Illumination LED Lamps on Left and Right Walls \$20mm one in tiple stack) Dord Deening Dire	Capacity		30	02 L		
Temperature Accuracy ±0.1°C (@37°C) Temperature Uniformity ±0.2°C (@37°C) Temperature Stability ±0.2°C (@37°C) Tomo Recover Time After Door is Opened for 30s ≤6min (@37°C) Speed * 0(stop). 30-500 RPM Speed * 0(stop). 30-500 RPM CO2 Sensor NA 11 RPM OC02 Sensor NA 0-20% CO2 Control Range NA 0-20% CO2 Control Range NA 20.1% Ocot Rol Range NA 20.1% Ocot Rol Rocuracy NA 20.1% CO2 Control Range NA 20.1% CO2 Rocover Time After Door is Opened for 30s NA 20.1% Programmable Segments 12 Segments 95% Timer 0-9991% Smin 90% 50% Disinfection UV Lamps on Left and Right Walls 90% X55 x855 x555 x690mm w foet) mn ItemaW Adving Height 1055 x 855 x55 x555 x690mm w foet) mn 105 x55 x55 x55 x55 x690mm w foet) mn Internal Working Height 105 x 855 x55 x690mm w foet) mn 105 x65 x 855 x690mm w foet) mn	Max Load	20 kg (44.1 lb)				
Temperature Uniformity ± 0.2°C (@37°C) Temp Recover Time After Door is Opened for 30s ≤6min (@37°C) Speed** 0(stop), 30-300 RPM Speed** 0(stop), 30-300 RPM Orbit Diameter ¢25mm (01.0in) ¢50mm (02.1in) ¢25mm (01.0in) OC2 Control Range NA 0-20% CO2 Control Range NA 0.1fnfared CO2 Control Range NA 40.1% CO2 Recover Time After Door is Opened for 30s NA s6min (@5%) Relative Humidity NA 40.1% Timer 0-999hr 56min 95% Programmable Segments 12 Segments 95% Timer 0.999hr 56min 90x 560 x 306mm WoXbH (35.43 x 22.05 x 12.1m) 135 k 25 x 53 (400mm wf feet) mm WXbH (35.43 x 22.05 x 12.1m) 135 k 26 x 53 (400mm wf feet) mm WxbH (53.53 x 33.66 x 21.06 (+ 3.16in wf feet) in) 110metacker Internal Working Dimensions 135 k 26 k 53 x 53 (400mm wf feet) mm	1 0					
Temperature Stability ± 0.2°C (@37°C) Temp Recover Time After Door is Opened for 30s 0(stop), 30-300 RPM Speed Accuracy ±1 RPM Orbit Dameter 025mm (#1.0in) (£50mm (#2.in) Orbit Dameter 025mm (#1.0in) (£50mm (#2.in) 0.25mm (#1.0in) (£50mm (#2.in) CO2 Centrol Range NA 0-20% 0.25mm (#1.0in) (£50mm (#2.in) 0.25mm (#1.0in) (£50mm (#2.in) CO2 Centrol Range NA 0-20% 0.20% 0.25mm (#1.0in) (£50mm (#2.in) 0.0-20% CO2 Centrol Accuracy NA 4.0.1% 0.0-20%						
Temp Recover Time After Door is Opened for 30s s6min (@37°C) Speed Accuracy 0(stop), 30-300 RPM Speed Accuracy 11 RPM Orbit Diameter 025mm (01.0in) 050mm (02.1n) CO2 Control Range NA 0-20% CO2 Control Range NA 0.1% CO2 Control Range NA 0.1% CO2 Control Range NA 0.1% CO2 Control Range NA 90.1% CO2 Recover Time After Door is Opened to 30s NA s6min (@5%) CO2 Recover Time After Door is Opened to 30s NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr 59min 95% Illumination LED Lamps on Leff and Right Walls 0.00 x 560 x 308mm Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) 116% X 22.05 x 12.13in) External Dimensions 1355 x 835.6 k 535 (490mm wi feet) mm WXXH WXXH (53.5 x 33.6 k 200 k 21.06 (53.15 k 200 k 21.06 (53.5 k 23.6 k 21.0 (53.5 k 23.6 k 20.0 (50.00 k 20.00 k 20.00 k 20.00						
is Opened for 30s astmin (gg/r C) Speed** 0(stop), 30-300 RPM Speed Accuracy ±1 RPM Orbit Diameter 025mm (01.0in) 050mm (02 in) 025mm (01.0in) 050mm (02 in) CO2 Sensor NA 0-20% CO2 Control Range NA 0-20% CO2 Control Accuracy NA 40.1% CO2 Recover Time After Door is Opened for 30s NA s6min (@5%) Programmable Segments 12 Segments 12 Segments Timer 0-9999/fr 56min 11/// 10.1 Iblemidetion UV Lamps on Left and Right Walls 10/// 10.1 Diametoins 135x 855 5 55 56 60mm w/ 10.00 mm 135x 855 5 55 56 60mm w/ 10.00 mm Iblemate Working Height 308 mm (12.1 in) 11// 10.00 mm Net Weight 135x 33.65 x 21.06 (+ 3.15in w/ feet	· · · · · ·		± 0.2°C	C (@37°C)		
Speed Accuracy ±1 RPM Orbit Diameter @25mm (@1.0in) @50mm (@2 in) @25mm (@1.0in) @50mm (@2 in) CO2 Control Range NA Infrared 0-20% CO2 Control Accuracy NA 0-20% CO2 Control Accuracy NA 0-20% CO2 Control Accuracy NA 10.1% CO2 Recover Time After Door is NA \$6min (@5%) Relative Humidity NA 4.6tive Max Humidity NA 95% Programmable Segments 12 Segments Timer 0-999hr 59min Illumination LED Lamps on Left and Right Walls Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 1355x 855 5 55 (80mm w/ feet) mn WXDxH (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 1b) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Storage Interval 1 Minute	is Opened for 30s	≤6min (@37°C)				
Orbit Diameter Ø25mm (Ø1.0in) Ø25mm (Ø2.in) Ø25mm (Ø1.0in) Ø25mm (Ø1.0in) Ø50mm (Ø2.in) CO2 Control Range NA 0-20% CO2 Control Racuracy NA 40.1% CO2 Control Range NA 0-20% CO2 Control Racuracy NA 40.1% CO2 Control Accuracy NA 56min (@5%) Relative Humidity Type NA Active Max Humidity NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr 59min 10 Illumination LED Lamps on Left and Right Walls 10 Disinfection UV Lamps on Left and Right Walls 10 Moxing Dimensions 900 x 560 x 308mm 1(55.43 x 22.05 x 12.13in) External Dimensions 1355 x 535 (+80mm w/ free) in) 11 Internal Working Height<	1	0(stop), 30~300 RPM				
CO2 Sensor NA Infrared CO2 Control Range NA 0-20% CO2 Control Accuracy NA 0-20% CO2 Control Accuracy NA ±0.1% CO2 Recover Time After Door is Opened for 30s NA ±0.1% CO2 Recover Time After Door is Opened for 30s NA ≤6min (@5%) Relative Humidity Type NA Active Max Humidity NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr 59min 11 Illumination LED Lamps on Left and Right Walls 000 x 560 x 308mm Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions (35.43 x 22.05 x 12.13in) WxDxH (35.33 x 33.68 x 21.06 (+ 3.15in wi feet) in) Internal Working Dimensions 1355 x 855 x 535 (+80mm wi feet) mm WxDxH (33.33 x 33.68 x 21.06 (+ 3.15in wi feet) in) Internal Working Height 308 mm (12.1 in) Data Stored Time, Temperature, Speed, Instrument Status Time Temperature, Speed, CO2 Concentrating Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status Time Temperature, Speed, CO2 Concentrating Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status <td></td> <td colspan="5"></td>						
CO2 Control Range NA 0-20% CO2 Control Accuracy NA ±0.1% CO2 Recover Time After Door is Opened for 30s NA ±0.1% CO2 Recover Time After Door is Opened for 30s NA ≤6min (@5%) Relative Humidity Type NA Active Max Humidity NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr 59min 11 Illumination LED Lamps on Left and Right Walls 00 v 560 x 308mm Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) 1055 x 855 x 536 (+20mm W feet) mm NubxH (35.43 x 22.05 x 12.13in) 1355 x 356 (+2.106 mW / feet) mm WDXH (53.35 x 356 (+2.106 MT W) feet) mm 195 kg (430 lb) Dibiplay 7" Color Capacitive Touch Screen 17me, Temperature, Speed, LO2 Concentrati Parameter Protection Password Protected 101 Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati UBB Data Export Most Recent 17 Days of Data 101 Automatic Defrost <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>						
CO2 Control Accuracy NA ±0.1% CO2 Recover Time After Door is Opened for 30s NA s6min (@5%) Relative Humidity Type NA s6min (@5%) Relative Humidity Type NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr S9min Illumination LED Lamps on Left and Right Walls Disinfection UV Lamps on Left and Right Walls 000 V 560 x 308mm Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) 900 x 560 x 308mm WXDxH (35.43 x 22.05 x 12.10) 1355 x 555 x 555 (490mm w/ feet) mm Extornal Dimensions 1355 x 33.68 x 21.06 (+ 3.15in w/ feet) in) 1111 Internal Working Height 308 mm (12.1 in) 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protected Data Storage Interval Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval Imme, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval Imme, Temperature, Speed, In						
CO2 Recover Time After Door is Opened for 30s NA s@min (@5%) Relative Humidity Type NA Active Max Humidity NA 95% Programmable Segments 12 Segments 95% Timer 0~999hr 59min 95% Illumination LED Lamps on Left and Right Walls 01916 Disinfection UV Lamps on Left and Right Walls 01916 Disinfection Down-Swing (Optional up-swing door for pount of triple stack) 105:43 x 22 05 x 12.13in) Internal Working Dimensions 900 x 560 x 308mm (35.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (490mm w/ feet) mm WXDXH (53.35 x 33.68 x 21.06 (+ 3.15in w/ feet) m) 1000 (+ 20.15in w/ feet) mm 1000 (+ 20.15in w/ feet) mm WXDxH (53.35 x 33.68 x 21.06 (+ 3.15in w/ feet) m) 1000 (+ 20.15in w/ feet) mm 1000 (+ 20.15in w/ feet) mm MXDxH 195 kg (430 lb) 100 (+ 20.15in w/ feet) mm 1000 (+ 20.15in w/ feet) mm MXDxH 195 kg (430 lb) 100 (+ 20.15in w/ feet) mm 1000 (+ 20.15in w/ feet) mm Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed	<u> </u>					
Opened for 30s NA Storm((g0%)) Relative Humidity Type NA Active Max Humidity NA 95% Programmable Segments 12 Segments 95% Timer 0-999hr 59min 1 Illumination LED Lamps on Left and Right Walls 1 Disinfection UV Lamps on Left and Right Walls 1 Door Opening Direction Down-Swing (Optional up-awing door for top unit of triple stack) 1 Internal Working Dimensions 900 x 560 x 308mm 30.54 x 32.05 x 12.13in) External Dimensions (1353 x 35.64 x 21.06 (+ 3.15in w/ feet) inm 1 NWXDxH (63.33 x 33.66 x 21.06 (+ 3.15in w/ feet) inm 1 Internal Working Height 30.8 mm (12.1 in) 1 Net Weight 195 kg (430 lb) 1 Display 7" Color Capacitive Touch Screen 1 Parameter Protection Passord Protected 1 Data Storage Interval 1 1 1 Storage Interval Most Recent 71 Days of Data 2 2 Automatic Defrost Yes </td <td>,</td> <td><u>۱</u></td> <td>NA</td> <td colspan="2">±0.1%</td>	,	<u>۱</u>	NA	±0.1%		
Max Humidity NA 95% Programmable Segments 12 Segments 0-999hr 59min Illumination LED Lamps on Left and Right Walls Disinfection UV Lamps on Left and Right Walls Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm WxDxH (35.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm WxDxH (33.36 x 22.05 x 12.13in) External Dimensions 1355 x 356 x 21.05 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Max Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Screen Data Display Storage VisB Data Export Most Recent 12 Days of Data Yes Noise Level ≤55dB (When Compressor is Running) Automatic Defrost Yes Power when		NA		≤6min (@5%)		
Programmable Segments 12 Segments Timer 0-999hr 59min Illumination LED Lamps on Left and Right Walls Disinfection UV Lamps on Left and Right Walls Dor Opening Directon Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm WXDXH (55.435 x 553 (+80mm w/ feet) mm External Dimensions 1355 x 555 x 555 x 555 (+80mm w/ feet) in) WXDXH (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (43.01 b) Display 7* Color Capacitive Touch Screen Parameter Protection Password Protected Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Data Storage Interval 1 Minute Screen Data Display Displays Most Recent 71 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level <55dB (When Compressor is Running)						
Timer 0-999hr 59min Illumination LED Lamps on Left and Right Walls Disinfection UV Lamps on Left and Right Walls Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm WXDXH (35.43 x 22.05 x 12.13in) External Dimensions 900 x 560 x 308mm (feel) mm WXDXH (35.35 x 33.66 x 21.06 (+ 3.15in w feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7° Color Capacitive Touch Screen Parameter Protection Password Protected Data Storad Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Displays K Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Yes Power when Heating ≤300W Moxer Apower					95%	
Illumination LED Lamps on Left and Right Walls Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm WxDXH (35.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm WxDXH (33.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm WxDXH (33.35 x 33.66 x 2.1.06 (+ 3.15in w/ feet) m) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Yes Noise Level Noise Level ≤55dB (When Compressor is Running) Autoratic Defrost Yes Power when Cooling ≤800W ≤800W S800W Power when Cooling	<u> </u>	· · · · ·				
Disinfection UV Lamps on Left and Right Walls Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm WXDXH (35.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm WxDXH (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7° Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power when Cooling ≤800W Power when Cooling ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monito						
Door Opening Direction Down-Swing (Optional up-swing door for top unit of triple stack) Internal Working Dimensions 900 x 560 x 308mm (33.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status USB Data Export Most Recent 912 Days of Data USB Data Export Most Recent 912 Days of Data Noise Level ≤55dB (When Compressor is Running) Automatic Defrost Yes Power when Heating ≤800W Power when Cooling ≤300W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE						
Internal Working Dimensions WXDXH 900 x 560 x 308mm (35.43 x 22.05 x 12.13in) External Dimensions WXDXH (35.43 x 22.05 x 12.13in) Internal Working Height 1355 x 835 k 53.68 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status USB Data Export Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power when Heating ≤800W Power when Cooling ≤300W Mosile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE						
WXDXH (35.43 x 22.05 x 12.13in) External Dimensions 1355 x 855 x 535 (+80mm w/ feet) mm (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Stored Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Time, Temperature, Speed, CO2 Concentrati Status ViSB Data E						
WxDxH (53.35 x 33.66 x 21.06 (+ 3.15in w/ feet) in) Internal Working Height 308 mm (12.1 in) Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Time, Temperature, Speed, Instrument Status Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE		(35.43 x 22.05 x 12.13in)				
Net Weight 195 kg (430 lb) Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Yes Noise Level ≤55dB (When Compressor is Running) Automatic Defrost Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤1000W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE						
Display 7" Color Capacitive Touch Screen Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute 1 Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level <55dB (When Compressor is Running)	Internal Working Height	308 mm (12.1 in)				
Parameter Protection Password Protected Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤300W Power when Cooling ≤300W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE	Net Weight					
Data Stored Time, Temperature, Speed, Instrument Status Time, Temperature, Speed, CO2 Concentrati Humidity, Instrument Status Data Storage Interval 1 Minute Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE	Display					
Data Stored Humidity, Instrument Status Data Stored 1 Minute Screen Data Display Displays Most Recent 7 Days of Data USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE	Parameter Protection					
Screen DatDisplays Most Recent 7 Days of DataUSB Data ExportMost Recent 912 Days of DataAutomatic DefrostYesNoise Level<55dB (When Compressor is Running)	Data Stored	Time, Temperature, S	peed, Instrument Status			
USB Data Export Most Recent 912 Days of Data Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interuption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE	Data Storage Interval					
Automatic Defrost Yes Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interruption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE	Screen Data Display					
Noise Level ≤55dB (When Compressor is Running) Auto-Recovery after Power Interruption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE						
Auto-Recovery after Power Interruption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE						
Interuption Yes Power supply AC 110V±11V, 60Hz Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE		≤55dB (When Compressor is Running)				
Power when Heating ≤800W Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE *Sticky Mat can be cut to fit platform		Yes				
Power when Cooling ≤300W Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE *Sticky Mat can be cut to fit platform	Power supply	AC 110V±11V, 60Hz				
Max Power ≤1000W Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE *Sticky Mat can be cut to fit platform	Power when Heating					
Mobile Monitoring and Control by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE *Sticky Mat can be cut to fit platform	Power when Cooling					
by WiFi Optional through IS-A64W Accessory and App Warranty 2 Years Parts and Service Certification CE *Sticky Mat can be cut to fit platform		≤1000W				
Certification CE *Sticky Mat can be cut to fit platform		Optional through IS-A64W Accessory and App				
*Sticky Mat can be cut to fit platform	Warranty	2 Years Parts and Service				
	Certification			CE		
	*Sticky Mat can be cut to fit platfor	rm				
**Note: Double Stack units it is recommended that the Shaker Speed of the top unit <250 rpm Triple Stack units it is recommended that the Shaker Speed of the middle and top unit < 250 rpm.						



PRODUCT DIMENSIONS

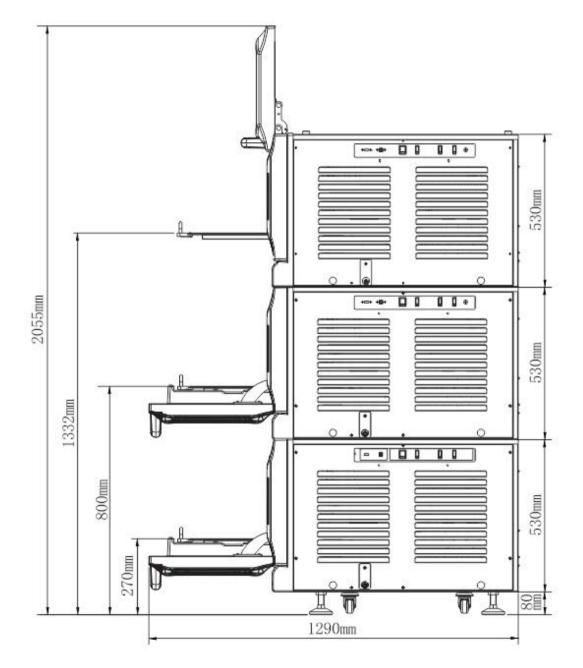






PRODUCT DIMENSIONS

Triple Stack with Top Up-Swing Door Dimensions





PRODUCT ACCESSORIES



Tube Rack

- Cococoo

Adjustable Tube Rack



Spring Frame



Infusion Bottle Clamp



96-Well Micro-Plate Holder



Flask Clamps



Sticky Mat



Bioreactor Tube Holder



Fixture for Separating Funnel



CO2 Cylinder Pressure Regulator



Water Carboy



Stand for AEOLUS Incubator Shakers



Multi Micro-Plate holder



Visor Cover



AEOLUS™ IS-18CA/IS-18A AND IS-18C5A/IS-18B5A STACKABLE CO2/NON-CO2 INCUBATOR SHAKERS ACCESSORY SPECIFICATIONS

Item Number	Item Type	Specifications	Max Capacity
IS-A50		Holds 25 mL Flask	134
IS-A1		Holds 50 mL Flask	134
IS-A2		Holds 100 mL Flask	60
IS-A3		Holds 150 mL Flask	60
IS-A4		Holds 200 mL Flask	60
IS-A5	Flask Clamp	Holds 250 mL Flask	60
IS-A6		Holds 500 mL Flask	32
IS-A7	-	Holds 1000 mL Flask	22
IS-A9		Holds 3000 mL Flask	12
IS-A10		Holds 5000 mL Flask	6
IS-A11		Holds 40 Tubes x ø14mm	9
IS-A12		Holds 40 Tubes x ø16mm	9
IS-A23	Tube Rack	Holds 40 Tubes x ø18mm	9
IS-A24		Holds 27 Tubes x ø22mm	9
IS-A42		Holds 21 Tubes x ø30mm	9
IS-A20		Holds 40 Tubes x ø14mm	9
IS-A21		Holds 40 Tubes x ø16mm	9
IS-A30	Adjustable Tube Deels	Holds 40 Tubes x ø18mm	9
IS-A31	Adjustable Tube Rack	Holds 27 Tubes x ø22mm	9
IS-A32		Holds 21 Tubes x ø30mm	9
IS-A37		Holds 24 Tubes x ø30mm	6
IS-A33		Holds 500 mL Infusion Bottle	40
IS-A34	Infusion Bottle Clamp	Holds 1000 mL Infusion Bottle	28
IS-A13	Microplate Holder	96-Well Microplate Holder	30
IS-A175	Multi-Microplate Holder	Holds up to 6 Standard Microplates	30
IS-A35	Fixture holds Separating Funnel	Holds Separating Funnels of ≥500mL	4
IS-A47	5.5"x5.5" Sticky Mat	140 x 140mm (5.51 x 5.51 in)	24
IS-A122	11"x11" Sticky Mat	280 x 280 mm (11.02 x 11.02 in)	6
IS-A63		900 x 540 x 80mm	1
IS-A27		350 x 240 x80mm	4
IS-A22	Spring Frame	450 x 400 x 80mm	1
IS-A14		428 x 295 x 80mm	2
IS-A90	Water Carboy	For IS-18CA humidity function Holds 15L 1 can serve up to 3 incubator shakers	1
IS-A118	Stand	Adds 340 mm (13.39in) of height Recommended for use with single and double stacks	1
IS-A64W	Remote Monitoring and Control	Connects each unit to users' smart phones via a wifi or wired internet connection and an app available on the Apple Store and Google Play	1
CIA25	CO2 Cylinder Pressure Regulator	Max Inlet Pressure: 3000 psi Max Outlet Pressure: 60 psi	-
IS-A166	Bioreactor Tube Holder	Holds 450mL Bioreactor Conical Tubes	6
IS-A178		Holds 600mL Bioreactor Conical Tubes	6
IS-A176	Visor Cover	Blocks ambient light from entering chamber	1





For over 25 years Crystal Technology and Industries has been driven to deliver exceptional value to the scientific marketplace by developing innovative equipment and Cryo Storage Solutions for today's scientist.