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Airea™ CO2 Incubator, Stackable, 6.75 Cu/Ft





Overview Crystal CO2/Non-CO2 302L and 190L Incubator Shakers

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
- Choose your Custom Stack, choice of CO2 and NonCO2, 25 or 50mm Orbit
- 2 Year Warranty
- Units shipped pre-stacked on single pallet, single, double or triple stack. (Stand sold separately.)



Overview Crystal CO2/Non-CO2 302L and 190L Incubator Shakers

INNOVATIVE DESIGN

- **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 IS-18CA/IS-18A: Capacity up to 6 x 5L (Thompson) Flasks; Compact IS-ACMA/IS-AMA; Capacity up to 4 x 5L (Thompson) Flasks.
- **Pull Out Rail Platform:** Operators can easily pull the platform out to load or unload samples. Only one locking handle in the middle of the platform makes the process fast and convenient. Universal Platform is shipped pre-installed in the unit.
- **Excellent Temperature Control Performance:** When the incubator is at a stable temperature of 37° C, the uniformity is ±0.1° C.
- **Strong Cooling Capacity:** The incubator chamber can be cooled to 15° C below the ambient temperature (Lowest temp is 4° C).
- **Inverter Compressor:** Makes cooling a quiet, 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 a set 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.
- **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.



Overview Crystal CO2/Non-CO2 302L and 190L Incubator Shakers

CAPACITIVE TOUCH SCREEN DISPLAY

Main Interface

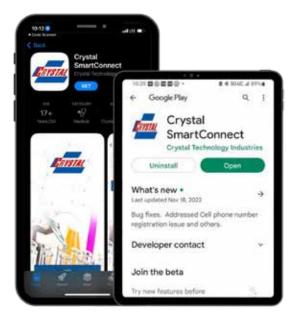
- 1. Displays the current instrument status.
- 2. Light button: Press to turn the light on or off.
- 3. Displays the current function's running status, orbit diameter (for speed), and any alarms.
- 4. Plus and Minus buttons: Adjusts the corresponding function's value.
- 5. Displays the set value and 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 right), 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 two (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.
- Optional Remote WiFi / Ethernet monitoring accessory and smart phone app enabled 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.

8





Remote Monitoring APP

Crystal Industries' Remote Monitoring accessory and app gives customers the ability to control their incubator right from their phone or tablet via WiFi Connection. Features of the incubator app include the ability to set and change the incubator's parameters (including temperature and CO2 concentration). Text notifications are sent when an alarm is activated. This unique app makes it possible to stay conveniently connected with CTI incubator and ongoing projects, whether you are in the lab or not.

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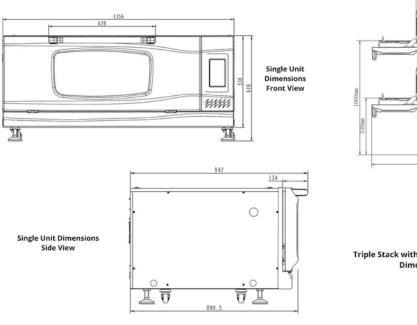
AEOLUS™ IS-18CA/IS-18A CO2/Non-CO2 Incubator Shaker

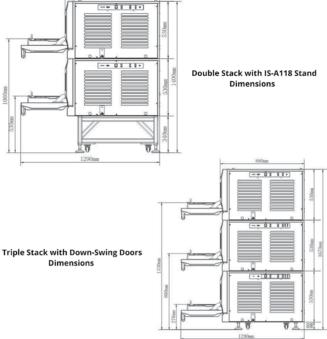
The CO2 Incubator Shaker features Temperature, Shaking, CO2 Concentration, and Humidity controls. Its stackable design helps maximize floor space, with the capability to stack up to three units high.



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 Thompson shaker flasks
- Infra-Red(IR) CO2 sensor for precise and reliable CO2 detection
- Optional WiFi and RS485 monitoring and control
- Audible and visual alarms
- Mirror finish, pharmaceutical-grade stainless steel chamber
- Stackable design up to 3 units
- Choose your Custom Stack, choice of CO2 and NonCO2, 25 or 50mm Orbit
- 25mm and 50mm Orbit Models available
- 2 Year Warranty
- Units shipped pre-stacked on single pallet, single, double or triple stack (Stand sold separately)







Specifications

Model	IS-18A	IS-18B5A	IS-18CA	IS-18C5A	
Product Name	AEOLUS™ Incubator Shaker	AEOLUS™ Incubator Shaker (50mm orbit)	AEOLUS™ CO2 Incubator Shaker	AEOLUS™ CO2 Incubator Shaker (50mm orbi	
Platform Dimensions (WxD)		900 x 560 mr	n (35.4 x 22 in)		
Max Capacity*	Clamp capacity: 25mLx134 / 50mLx134 / 100mLx60 / 150mLx60 / 200mLx60 / 250mLx60 / 500mLx32 / 1000mLx22 / 2000mLx15 / 5000mL (Shaker Flask) x 6 Capacity with Sticky Mats: 25mLx187 / 50mLx187 / 100mLx112 / 150mLx104 / 200mLx84 / 250mLx76 / 500mLx40 / 1000mLx28 / 2000mLx15 / 5000mL (Shaker Flask) x 6				
Capacity		30	2 L		
Max Load			44.1 lb)		
Temperature Range			60°C (Lowest Temp is 4°C)		
Temperature Accuracy		±0.1°C	(@37°C)		
Temperature Uniformity		±0.1°C	(@37°C)		
Temperature Stability		±0.1°C	(@37°C)		
Temp Recover Time After Door is Opened for 30s		≤6min	(@37°C)		
Speed**		0 (stop), 3	0~300 RPM		
Speed Accuracy		±1	RPM		
Orbit Diameter	Ø25mm (Ø1.0in)	Ø50mm (Ø2 in)	Ø25mm (Ø1.0in)	Ø50mm (Ø2 in)	
CO2 Sensor	Ν	IA	Ir	frared	
CO2 Control Range	Ν	IA	0	~20%	
CO2 Control Accuracy	Ν	IA	-	-0.1%	
CO2 Recover Time After Door is Opened for 30s	NA ≤6min (@5%)				
Relative Humidity Type	N	IA	A	Active	
Max Humidity	N	IA		95%	
Programmable Segments		12 Se	gments		
Timer		0-999h	r 59min		
Illumination		LED Lamps on Le	eft and Right Walls		
Disinfection		UV Lamps on Le	ft and Right Walls		
Door Opening Direction		Down-Swing (Optional up-swing	g door for top unit of triple sta	ck)	
Internal Working Dimensions (WxDxH)		900 x 560 x 308mm (3	5.43 x 22.05 x 12.13in)		
External Dimensions (WxDxH)	1355 x 8	55 x 535 (+80mm w/ feet) mm (53.35 x 33.66 x 21.06 (+ 3.1in	w/ feet) in)	
Internal Walking Height		308mm	ı (12.1in)		
Net Weight			(430 lb)		
Display		7" Color Capaci	tive Touch Screen		
Parameter Protection		Password	Protected		
Data Stored	Time, Temperature, Sp	beed, Instrument Status		peed, CO2 Concentration, Instrument Status	
Data Storage Interval			inute		
Screen Data Display			ent 7 Days of Data		
USB Data Export		Most Recent 9	12 Days of Data		
Automatic Defrost			es		
Noise Level	≤55dB (When Compressor is Running)				
Auto-Recovery after Power Interuption			es		
Power supply			±11V, 60Hz		
Power when Heating			00w		
Power when Cooling	≤300w				
Max Power			000w		
Mobile Monitoring and Control by WiFi		V	64W Accessory and App		
Warranty			s and Service		
Certification		(E		

**Note: Double Stack units is recommended that the Shaker Speed of the top unit <250 rpm Triple Stack units is recommended that the Shaker Speed of the middle and top unit<250 rpm

Accessories









Mini Universal Spring Platform



Infusion Bottle

Clamp



Bioreactor Tube

Holder



Flask Clamp



Stand for IS-18CA/ IS-18A Incubator Shakers (Single or Double Stack)



96-Well Microplate Holder



Sticky Mat

Pressure

Regulator



CO2 Cylinder Water Carboy



Multi-Microplate Holder

Fixture for Separating Funnel

Visor Cover

ltem Number	Item Type	Specifications	Max Capacity	ltem Number	ltem Type	Specifications	Max Capacity
IS-A50		Holds 25mL Flask	134		Fixture holds	Holds Separating Funnels	
IS-A1		Holds 50mL Flask	134	IS-A35	Separating Funnel	of ±500ml	4
IS-A2		Holds 100mL Flask	60	IS-A47		140 x 140mm (5.51 x 5.51in)	24
IS-A3		Holds 150mL Flask	60		Sticky Mat		
IS-A4	Elash Classa	Holds 200mL Flask	60	IS-A122		280 x 280mm (11.02 x 11.02in)	6
IS-A5	Flask Clamp	Holds 250mL Flask	60	IS-A63		900 x 540 x 80mm	1
IS-A6		Holds 500mL Flask	32	IS-A27	Spring Frame	350 x 240 x80mm	4
IS-A7		Holds 1000mL Flask	22	IS-A22	spring runne	450 x 400 x 80mm	1
IS-A9		Holds 3000mL Flask	12	IS-A14		428 x 295 x 80mm	2
IS-A10		Holds 5000mL Flask	6			For IS-18CA humidity	
IS-A11		Holds 40 Tubes x Ø14mm	9	9 IS-A90	Water Carboy	function; Holds 15L; 1 can serve up to	1
IS-A12		Holds 40 Tubes x Ø16mm	9			3 incubator shakers	
IS-A23	Tube Rack	Holds 40 Tubes x Ø18mm	9		Remote	Connects each unit to users'	
IS-A24		Holds 27 Tubes x Ø22mm	9			smart phones via a WiFi	
IS-A42		Holds 21 Tubes x Ø30mm	9	IS-A64W	Monitoring and	or wired internet connection and	1
IS-A20		Holds 40 Tubes x Ø14mm	9		Control	an app available on the Apple Store and Google Play	
IS-A21		Holds 40 Tubes x Ø16mm	9	9 9 CIA25		3,	
IS-A30	Adjustable	Holds 40 Tubes x Ø18mm	9 CIA25		CO2 Cylinder Pressure	Max Inlet Pressure: 3000 psi	_
IS-A31	Tube Rack	Holds 27 Tubes x Ø22mm	9		Regulator	Max Outlet Pressure: 60 psi	
IS-A32		Holds 21 Tubes x Ø30mm	9			Adds 34mm (13.39in) of height	
IS-A37		Holds 24 Tubes x Ø30mm	6	IS-A118	Stand	Recommended for use with	_
IS-A33	Infusion	Holds 500 ml Infusion Bottle	40			Single and Double Stacks	
IS-A34	Bottle Clamp	Holds 1000 ml Infusion Bottle	28	IS-A166	Bioreactor Tube	Holds 450ml Bioreactor Conical Tubes	6
IS-A13	Microplate Holder	96-Well Microplate Holder	30	IS-A178	Holder	Holds 600ml Bioreactor Conical Tubes	6
IS-A175	Multi- Microplate Holder	Holds up to 6 Standard Microplates	30	IS-A176	Visor Cover	Blocks ambient light from entering chamber	1



AEOLUS[™] CO2/Non-CO2 Compact Incubator Shakers (3mm, 25mm or 50mm Orbit Models)

The CO2 Compact Incubator Shaker features Temperature, Shaking, CO2 Concentration, and Humidity controls. With 3mm, 25mm and 50mm orbit models available, its stackable design helps maximize floor space, with the capability of stacking up to three units high. Featuring an innovative Magnetic Drive for increased reliability and minimal maintenance.



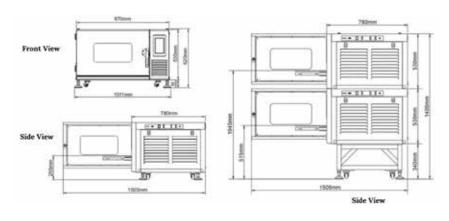
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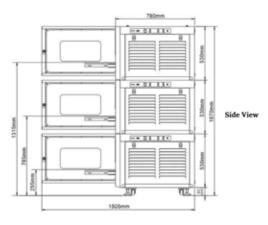
- 7" High-Res Color Touch Screen with intuitive graphic interface
- Innovative chamber design features smooth rounded internal corners for easy cleaning
- Infra-Red(IR) CO2 sensor for Rrecise and reliable CO2 cletection
- Optional WiFi and RS485 control
- UV lights for easy sterihzation
- Audible and visual alarms
- Mirror finish, pharmaceutical grade stainless steel cfiamber
- Stackable design up to 3 units
- Choose your Custom Stack, choice of CO2 and NonCO2, 25 or 50mm Orbit
- 3mm, 25mm and 50mm orbit models available
- 2 Year Warranty
- Units shipped pre-stacked on single pallet, single, double or triple stack (Stand sold separately)

Single Unit Dimensions

Double Stack Dimensions with IS-A93 Stand

Triple Stack Dimensions





Model	IS-AMA	IS-A5M	IS-ACMA	IS-A5CMA			
Product Name	AEOLUS™ Compact Magnetic Drive AEOLUS™ Compact Magnetic Drive Incubator Shaker CO2 Incubalor Shaker						
Platform Dimensions (WxD)		560 x 470mm (21.65 x 18.50in)					
Max Capacity	5000mL (Thompson) x4	mLx30 / 150mLx30 / 200mLx30 / 53 / 150mLx41 / 200mLx32 / 250i					
Capacity		190					
Max Load		10kg (2					
Temperature Range		Room Temp. Minus 18°C~					
Temperature Accuracy		±0.					
Temperature Uniformity		±0.1°C					
Temp Recovery Time After Door is Opened for 30s		≤6min (· · · · ·				
Speed		0 (stop), 30)~300 RPM				
Speed Accuracy		±1 F	RPM				
Speed Drive Motor		Magnet	ic Drive	1			
Orbit Diameter	Ø25mm (Ø1.02in)	Ø50mm (Ø2 in)	Ø25mm (Ø1.02in)	Ø50mm (Ø2 in)			
CO2 Sensor	N	А	Infr	ared			
CO2 Control Range	N	A	0~	20%			
CO2 Control Accuracy	N	A	+(0.1%			
CO2 Recovery Time After Door is Opened for 30	N	A	≤6min (@5%)				
Relative Humidity Type	Act		Active				
Max Humidity	90		90%				
Programmable Segments		12 Seg	•				
Timer	0~999h 59min						
Illumination Disinfection		UV Lamps on Lef	ft and Right Walls				
Door Opening Direction		Leftv	-				
Internal Dimensions (WxDxH)	-	654 x 605 x 474 mm (2					
Outside Dimensions (WxDxH)	970 x	780 x 530mm (+80 with feet) (38	· · · · · · · · · · · · · · · · · · ·	h feet)			
Internal Working Height		300mm	· · · · · · · · · · · · · · · · · · ·				
Net Weight		170kg	· · · ·				
Display		7″ Color Capacit	ive Touch Screen				
Parameter Protection		Password	Protected				
Data Stored	Time, Temperature, Sp	eed, Instrument Status	Time, Temperature, Speed, CO2 Concentration, Humidity, Instrument Status				
Data Storage Interval		1 Mi	nute				
Screen Data Display		Displays Most Rec	ent 7 Days of Data				
USB Data Export		Most Recent 91	2 Days or Data				
Automatic Defrost		Ye	es				
Noise Level	≤55dB (When Compressor is Running)						
Auto-Recovery after Power Interuption	Yes						
Power when Healing	≤450W						
Power when Cooling	≤180W						
Power supply			:11V, 60Hz				
Power	≤63	OW	≤6	30W			
Mobile Monitoring and Control by WiFi		Optional through IS-A6	4W Accessory and App				
Warranty	2 Years Parts and Service						
Certification		C	E				

Accessories





Test Tube Rack

Adjustable Test Tube Rack



Mini Universal Spring Platform



Infusion Bottle Clamp



96-Well

Microplate Holder

Sticky Mat



CO2 Cylinder Pressure Regulator



Water Carboy



Bioreactor Tube Holder



Flask Clamp



IS-ACMA/IS-AMA Incubator Shakers (Single or Double Stack)



Multi-Microplate Holder



Fixture for Separating Funnel



Visor Cover

ltem Number	Item Type	Specifications	Max Capacity
IS-A50		Holds 25mL Flask	72
IS-A1		Holds 50mL Flask	72
IS-A2		Holds 100mL Flask	30
IS-A3		Holds 150mL Flask	30
IS-A4		Holds 200mL Flask	30
IS-A5	Flask Clamp	Holds 250mL Flask	30
IS-A6		Holds 500mL Flask	16
IS-A7		Holds 1000mL Flask	12
IS-A8	-	Holds 2000mL Flask	6
IS-A10		Holds 5000mL Flask	4
IS-A11		Holds 40 Tubes x Ø14mm	6
IS-A12		Holds 40 Tubes x Ø16mm	6
IS-A23	Tube Rack	Holds 40 Tubes x Ø18mm	6
IS-A24		Holds 27 Tubes x Ø22mm	6
IS-A42		Holds 21 Tubes x Ø30mm	6
IS-A20		Holds 40 Tubes x Ø14mm	6
IS-A21		Holds 40 Tubes x Ø16mm	6
IS-A30	Adjustable	Holds 40 Tubes x Ø18mm	6
IS-A31	Tube Rack	Holds 27 Tubes x Ø22mm	6
IS-A32		Holds 21 Tubes x Ø30mm	6
IS-A37		Holds 24 Tubes x Ø30mm	3
IS-A33	Infusion Bottle	Holds 500 ml Infusion Bottle	21
IS-A34	Clamp	Holds 1000 ml Infusion Bottle	13
IS-A13	Microplate Holder	96-Well Microplate Holder	18
IS-A175	Multi- Microplate Holder	Holds up to 6 Standard Microplates	18

NOTE: 3000mL flask clamps (IS-A9) are available for use with 2.8L Fembach flasks. Flasks must be shorter than the working height of the incubator shaker chamber (300mm).

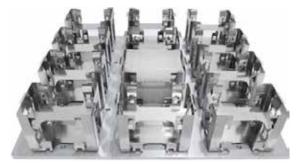
ltem Number	Item Type	Specifications	Max Capacity
IS-A35	Fixture holds Separating Funnel	Holds Separating Funnels of ±500mL	3
IS-A47		140 x 140mm (5.51 x 5.51in)	12
IS-A122	Sticky Mat	280 x 280mm (11.02 x 11.02in)	2
IS-A93		550 x 470 x 80mm	1
IS-A27	с.: г	350 x 240 x80mm	4
IS-A22	Spring Frame	450 x 400 x 80mm	1
IS-A14		428 x 295 x 80mm	2
IS-A90	Water Carboy	For IS-ACMA humidity function. Holds 15L; 1 can serve up to 3 incubator shakers	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	1 (up to 2 units)
IS-A166	Bioreactor Tube	Holds 450ml Bioreactor Conical Tubes	3
IS-A178	Holder	Holds 600ml Bioreactor Conical Tubes	3
IS-A95	Visor Cover	Blocks ambient light from entering chamber	1
IS-A93	Stand	Adds 340mm (13.39in) of height recommended for use with single and double stacks	1

AEOLUS[™] IS-AHC3SA/IS-AH3GA Compact CO2/Non-CO2 Stackable Incubator Shakers for Microplates (3mm Orbit)

The Compact CO2/non-CO2 Microplate Incubator Shakers feature a 3mm orbit, optimized for thorough mixing of microplates and deep-well microplates with variable shaking speeds of 150-1000 rpm for gentle mixing to ensure the well contents remain in place or for more vigorous agitation for effective aeration across the small surface area of each of the wells. Featuring an innovative Magnetic Drive for increased reliability and minimal maintenance.



Holds & OR Hol Deep-v



Microplate Platform Options

For Shaking Microplates or Deep-well Plates at speeds of 150-1000rpm

• The IS-A152 Platform pre-installed in each unit with optional IS-A157 Column Clamp Pressure Pads (blue) and IS-A158 Silicon Pads accessories (purchased separately)

Holds 60 Microplates (3 layers x 20 Microplates) OR Holds 40 Deep-well Plates (2 layers x 20 Deep-well Plates)

For Shaking Deep-well Plates at speeds of 150-1000rpm

• The IS-A119 Aluminum Platform with optional IS-A167 Deep-Well Plate Holders (purchased separately) offers convenient, fast loading and unloading of plates.

Holds 12 sets of Double-Layer Deep-Well Holders (24 Deep-Well Plates total)



Model	IS-AH3GA	IS-AHC3SA			
Product Name	180L Compact Magnetic Drive Incubator Shaker, Microplates	180L Compact Magnetic Drive CO2 Incubator Shaker, Microplates			
Platform Dimensions (WxD)	570 x 500mm				
Max Capacity	Microplate: 3 x 20 Plates, Deepwell Plate 2 x 20 Plates				
Capacity	180				
Max Load	10kg (2	2.05lb)			
Temperature Range	Room Temp. Minus 18°C~o				
Temperature Accuracy	±0.1				
Temperature Uniformity	±0.1°C ((@37°C)			
Temp Recovery Time After Door is Opened for 30s					
Speed	0 (stop), 30	~300 RPM			
Speed Accuracy	±1 R				
Speed Drive Motor	Magneti				
Orbit Diameter	3m				
CO2 Sensor	NA	Infrared			
CO2 Control Range	NA	0~20%			
CO2 Control Accuracy	NA	+0.1%			
CO2 Recovery Time After Door is Opened for 30	NA	≤6min (@5%)			
Relative Humidity Type	Active	Active			
Max Humidity	90%	90%			
Programmable Segments	12 Seg				
Timer	0~999h				
Illumination	LED Lamps on Lef				
Disinfection	UV Lamps on Left				
Door Opening Orientation	Leftv				
Internal Dimensions (WxDxH)	654 x 605 x 474 mm (25				
Outside Dimensions (WxDxH)	970 x 780 x 530mm (+80 with feet) (38				
Internal Working Height	290				
Net Weight	195				
Display	7″ Color Capaciti				
Parameter Protection	Password				
Data Stored	Time, Temperature, Speed, Instrument Status	Time, Temperature, Speed, CO2 Concentration, Humidity, Instrument Status			
Data Storage Interval	1 Mir				
Screen Data Display	Displays Most Rece				
USB Data Export	Most Recent 91	•			
Automatic Defrost	Ye	,			
Noise Level					
Auto-Recovery after Power Interuption	≤55dB (When Compressor is Running) Yes				
Power when Healing	≤450W				
Power when Cooling	≤450W ≤180W				
Power supply	AC 110V±11V, 60Hz				
Power					
I Offici	≤630W ≤630W ≤630W				
Mobile Monitoring and Control by WiFi	Optional through A	Accessory and App			
Mobile Monitoring and Control by WiFi Warranty	Optional through A 2 Years Parts				

Accessories



IS-A152 Platform with Pre-Installed Deep-Well Plate Holders

(Set of 73 Pressure Pads and Silicon Pads included with unit)



IS-A167 Platform with Double-Layer Deep-Well Plate Holders

(Deep-Well Plate Holders sold separately)



IS-A157 Pressure Pad for Microplate Holder



IS-A90 Water Carboy



IS-A158 Silicone Pad for Microplate Holder



CIA25 CO2 Cylinder Pressure Regulator



IS-A95 Visor Cover



IS-A93 Stand for Compact Incubator Shakers (Single or Double Stack)

ltem Number	Item Type	Specifications	Max Capacity
IS-A152	Deep-Well Plate Holder + Platform	Accommodates 2 layers of deep-well plates; Platform: 500 x 570mm; Column Height: 125mm	1
IS-A167	Double-Layer Deep-Well Plate Holder	Internal Dimensions: 127 x 85 x (25-51)mm; 2 Deep-Well Plates per holder	12
IS-A119	Platform for Deep-Well Plate Holders	Dimensions: 500 x 570mm; Holds 12 sets of Double-Layer Deep-Well Holders or 24 Deep-Well Plates	1
IS-A157	Pressure Pad for Microplate Holder	Thickness: 20mm; Outer Diameter: Ø27mm	73
IS-A158	Silicone Pad for Microplate Holder	Thickness 5mm; Outer Diameter Ø27mm	73
IS-A93	Stand for Compact Incubator Shakers (Single or Double Stack)	Adds 340 mm (13.39in) of height Recommended for use with single and double stacks	1
IS-A90	Water Carboy	For IS-AHC3SA humidity function; Holds 15L; 1 Carboy serves up to 3 incubator shakers	1
IS-A95	Visor Cover	Blocks ambient light from entering chamber	1
CIA25	CO2 Cylinder Pressure Regulator	Max Inlet Pressure: 3000 psi Max Outlet Pressure: 60 psi	1 (up to 2 Units)







Top-Hinge Incubator Shaker IS-RDD3A / IS-RSD3A

These versatile Benchtop incubator shakers with optional refrigeration (IS-RDD3A has a built-in refrigeration module with auto-defrost) are designed to provide an optimal environment to safely shake flasks, tubes racks, and micro-plates. These incubators are quiet, easy to operate, and convenient to load. Incubator Shakers are ideal for cell culture, solubility studies, extraction procedures, protein expression, and many other applications.



- Easy to use LCD user interface
- Precise Proportional-Integral-Derivative temperature control resulting in ±0.1°C accuracy
- A highly efficient inverted compressor refrigeration system allows for temperatures as low as 15°C below room temperature or 4°C with low energy consumption (IS-RDD3A only)
- Clear curved tempered glass window for viewing samples without disturbing chamber temperature
- The terminal feedback system ensures precise shaking speed
- Designed to reduce noise for quiet operation
- Max capacity is 8 x 1L flasks
- Timer 0~999 hours
- Audible and visual alarms activate when abnormal parameters are detected
- The program mode allows users to set up to 6 segments of varying temperature and speed

Model	IS-RDD3A	IS-RSD3A		
Product Name	Top-Hinge Incubator Shaker with Cooling	Top-Hinge Incubator Shaker		
Temp. Range	Ambient -15°C~60°C (Lowest Temp is 4°C)	Ambient +5°C~60°C		
Temp. Accuracy	±0.	1°C		
Temp. Uniformity	±0.5°C	(@37°C)		
Speed Range	0rpm, 30-	~400rpm		
Speed Accuracy	±1r	rpm		
Orbit Diameter	Ø26	mm		
Programmable Segments	6 Seg	ments		
Timer	0-99	9hrs		
Platform size	450 x 400mm (1	17.72 x 15.75in)		
Number of Platforms	1			
	Clamp capacity: 42x50mL / 25x100mL / 24x150mL / 20x200mL / 20x250mL / 12x500mL / 8x1000mL / 4x2000mL			
Maximum Capacity	Sticky mat: 56x50mL / 42x100mL / 30x150mL / 30x200mL / 24x250mL / 20x300mL / 14x500mL / 9x1000mL / 4x2000mL			
Power	<700W	<500W		
Power Supply	AC 110\	V / 60Hz		
Working Chamber Height	310mm (12.2in)			
Outer Dimensions (WxDxH)	712 x 687 x 628mm (28.03 x 27.05 x 24.72in)			
Inner Dimensions (WxDxH)	500 x 460 x 350mm (19.67 x 18.11 x 13.78in)			
Net Weight	242lb (110kg) 220lb (100kg)			
Certification	CE			



Accessories



Test Tube Rack



Adjustable Test Tube Rack



96-Well Microplate Holder



Various Flask Clamps



Bioreactor Tube Holder



Mini Universal

Spring Platform











Mini Universal Spring Platform

Sticky Mat

Multi-Microplate Holder

Infusion Bottle Clamp

Fixture for Separating Funnel

ltem Number	ltem Type	Specifications	Max Capacity
IS-A50		Holds 25mL Flask	42
IS-A1		Holds 50mL Flask	42
IS-A2		Holds 100mL Flask	25
IS-A3		Holds 150mL Flask	24
IS-A4	Various Flask Clamps	Holds 200mL Flask	20
IS-A5		Holds 250mL Flask	20
IS-A6		Holds 500mL Flask	12
IS-A7		Holds 1000mL Flask	8
IS-A8		Holds 2000mL Flask	4
IS-A47		140 x 140mm (5.51 x 5.51in)	9
IS-A122	Sticky Mat	280 x 280mm (11.02 11.02in)	1
IS-A11		Holds 40 Tubes x Ø14mm	4
IS-A12		Holds 40 Tubes x Ø16mm	4
IS-A23	Tube Rack	Holds 40 Tubes x Ø18mm	4
IS-A24		Holds 27 Tubes x Ø22mm	4
IS-A24		Holds 27 Tubes x Ø22mm	4

ltem Number	Item Type	Specifications	Max Capacity
IS-A20		Holds 40 Tubes x Ø14mm	4
IS-A21		Holds 40 Tubes x Ø16mm	4
IS-A30	Adjustable	Holds 40 Tubes x Ø18mm	4
IS-A31	Angled Tube Racks	Holds 27 Tubes x Ø22mm	4
IS-A32		Holds 21 Tubes x Ø30mm	4
IS-A37		Holds 24 Tubes x Ø30mm	2
IS-A19	Mini Universal	165 x 165 x 80mm	4
IS-A22	Spring	450 x 400 x 80mm	1
IS-A27	Platform	350 x 240 x 80mm	2
IS-A35	Fixture for Separating Funnel	Holds Separating Funnels of ≥500mL	4
IS-A33	Infusion	Holds 50mL Infusion Bottle	9
IS-A34	Bottle Clamp	Holds 1000mL Infusion Bottle	8
IS-A13	Microplate Holder	96-Well Microplate Holder	9
IS-A175	Multi-Micro- plate Holder		
IS-A166	Bioreactor Tube Holder	Holds 450mL Bioreactor Conical Tubes	2

Benchtop Incubator Shaker IS-RSDAA

Compact Size shaker with advanced features, a sliding platform, and great visibility through a tempered glass door.





Features

- Versatile platform with wide selection of accessories
- Precise temperature control (ambient +5°C~ 80°C)
- Speeds of up to 300 RPM with orbit diameter of 26mm (1.02")
- The Sliding platform feature provides easy sample handling with Max Load 5 x 1L
- Fits conveniently under countertops

Model	IS-RSDAA
Product Name	Benchtop Incubator Shaker
Temperature Range	Ambient +5°C ~ 80°C
Temperature Accuracy	±0.1°C (@37°C)
Temperature Uniformity	±0.5°C (@37°C)
Speed Range	0 RPM, 30~300 RPM
Speed Accuracy	±1RPM
Platform Dimensions	350 × 300mm (13. x11. in)
Orbit Diameter	Ø26mm (Ø1.02 in)
Timer	0-99hr
Display	LED
Mar Caracita	Flask Clamps: 28 x 50mL / 16 x 100mL / 12 x 150mL / 9 x 200mL / 9 x 250mL / 6 X 500mL / 4 x 1L
Max Capacity	Sticky Mat: 28 x 50mL / 20 x 100mL / 15 x 150mL / 14 x 200mL / 12 x 250mL / 8 x 500mL / 5 x 1L
Max Load	10 kg
Ambient Temperature	5°C~40°C
Ambient Relative Humidity	≤80%
Interior Dimensions (WxDxH)	392 x 330 x 365 mm (15.4 x 13.0 x 14.4 in)
Exterior Dimensions (WxDxH)	440 x 535 x 550 (17.3 x 21.1 x 21.7 in)
Power Supply	AC110V±11V/ 60Hz
Max Power	745W
Net Weight	50kg (110 lb)



Accessories



Adjustable Test Tube Rack



96-Well Microplate Holder





Various Flask Clamps

Infusion Bottle Clamp



Mini Universal Spring Platform



Mini Universal Spring Platform



Fixture for Separating Funnel



Sticky Mat

ltem Number	ltem Type	Specifications	Max Capacity
IS-A50		Holds 25mL Flask	28
IS-A1		Holds 50mL Flask	28
IS-A2	Various Flask Clamps	Holds 100mL Flask	16
IS-A3		Holds 150mL Flask	12
IS-A4		Holds 200mL Flask	9
IS-A5		Holds 250mL Flask	9
IS-A6		Holds 500mL Flask	6
IS-A7		Holds 1000mL Flask	4
IS-A13	96-Well Microplate Holder	136 x 95mm (5.4 x 3.7in)	6
IS-A11	Tube Rack	Holds 40 Tubes x Ø14mm	2
IS-A12		Holds 40 Tubes x Ø16mm	2
IS-A23		Holds 40 Tubes x Ø18mm	2
IS-A24		Holds 27 Tubes x Ø22mm	2

ltem Number	Item Type	Specifications	Max Capacity
IS-A20	Adjustable Angled Tube Racks	Holds 40 Tubes x Ø14mm	2
IS-A21		Holds 40 Tubes x Ø16mm	2
IS-A30		Holds 40 Tubes x Ø18mm	2
IS-A31		Holds 27 Tubes x Ø22mm	2
IS-A32		Holds 21 Tubes x Ø30mm	2
IS-A19	Mini Universal Spring Platform	165 x 165 x 80mm (6.5 x 6.5x3.1in)	1
IS-A27		350 x 240 x 80mm (13.8 x9.5 x 3.1in)	1
IS-A35	Fixture for Separating Funnel	Holds Separating Funnels of ≥500mL	2
IS-A33	Rottle Clamp	Holds 50mL Infusion Bottle	4
IS-A34		Holds 1000mL Infusion Bottle	2

CO2 Resistant Orbital Shaker

Orbital Shaker / Designed for CO2 Incubators (OSC-26M)

Developed to help you economically scale-up cell production in your existing CO2 Incubator. Designed with sealed electronics to minimize heat disruption and ensure that conditions in the CO2 chamber are not affected.





Aluminum platforms (OSA11 and OSA36) are easily interchangeable with the included platform and allow for compatibility with additional accessories like flask clamps, tube racks, etc.

Features

- Remote Control attaches externally to CO2 Incubator
- LED display on the remote control shows both set and actual parameters without opening the door
- Simple and intuitive design provides easy operation
- Alarm function alerts the user when the timer reaches zero
- Shaker is easy to remove for cleaning/disinfecting to protect your cells
- The Magnetic Orbital Drive system uses magnetic force to deliver precise speed control, low vibration, maintenance free operation and long service life
- Suitable for use in CO2, Standard or Refrigerated Incubators at up to 20% CO2 and 90% Humidity environments
- Wide range of accessories to accommodate various sample holders

Model	OSC-26M
Product Name	CO2 Resistant
Orbit Diameter	Ø19mm (.75in)
Speed	30~300rpm
Timer	0-99hrs 59min
Platform size	305 x 360mm (12x14.2in)
Max. Flask Capasity	30 x 25/50mL / 15 x 100/150/200/250mL / 9 x 500mL / 5 x 1L / 4 x 2L / 2 x 3L / 1 x 5L
Max. Load	6kg (13.2ib)
Operating Environment	Ambient Temp. 5°C~60°C
	Relative Humidity <95%
Max. Power	8.5W
Power supply	AC100-240V, 50Hz/60 Hz
Net Weight*	18 kg (37 lb)
Shaker Dimensions (WxDxH)	375 x 300 x 94mm (14.8 x 11.8 x 3.7in)
Control Box Dimensions (WxDxH)	90 x 160 x 26mm (3.5 x 6.3 x 1.02in)
Certification	CE

*Verify that shelf weight capacity of CO2 Incubator can hold weight of shaker.



CO2 Resistant Orbital Shaker

Accessories



Test Tube Rack



Adjustable Test Tube Rack



96-Well Microplate Holder





Various Flask Clamps

Infusion Bottle Clamp



Mini Universal Spring Platform



Fixture for Separating Funnel



Sticky Mat



Aluminum Platform

ltem Number	ltem Type	Specifications	Max Capacity*
IS-A50	Various Flask Clamps	Holds 25mL Flask	30
IS-A1		Holds 50mL Flask	30
IS-A2		Holds 100mL Flask	15
IS-A3		Holds 150mL Flask	15
IS-A4		Holds 200mL Flask	15
IS-A5		Holds 250mL Flask	15
IS-A6		Holds 500mL Flask	9
IS-A7		Holds 1000mL Flask	6
IS-A8		Holds 2000mL Flask	4
IS-A9		Holds 3000mL Flask	2
IS-A10		Holds 5000mL Flask	1
IS-A11	Tube Rack	Holds 40 Tubes x Ø14mm	2
IS-A12		Holds 40 Tubes x Ø16mm	2

*When using CI-191CXA Platform with Stick Mats

ltem Number	Item Type	Specifications	Max Capacity*
OSA11	Aluminum Platform	300 x 360mm	1
OSA36		400 x 400mm	1
OSA12	Nonslip Platform with Rubber Mat	305 x 360mm	1
IS-A27	Mini Universal Spring Platform	350 x 240 x 80mm (13.8 x 9.4 x 3.1in)	1
IS-A47	Sticky Mat	140 x 140mm (5.51 x 5.51in)	4
IS-A13	96-Well Microplate Holder	136 x 95mm (5.4 x 3.7in)	6
IS-A33	Infusion Bottle Clamp	Holds 50mL Infusion Bottle	5
IS-A34		Holds 1000mL Infusion Bottle	4
IS-A20	Adjustable Tube Racks	Holds 40 Tubes x Ø14mm	2
IS-A21		Holds 40 Tubes x Ø16mm	2
IS-A35	Fixture for Separating Funnel	Holds Separating Funnels of ≥500ml	2

CO2 Incubator

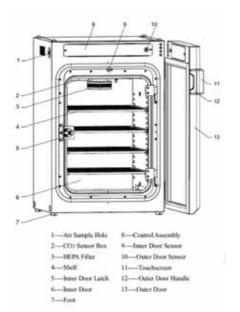
AIREA[™] CO2 Incubator (6.75 cu ft)

The AIREA[™] CO2 Incubator (CI-191CXA) is an air-jacketed, dry-wall insulation CO2 Incubator with temperature, CO2 concentration, and humidity functions. With this incubator, customers have the ability to visualize performance and data set on the AIREA[™] Remote Monitoring accessory and app.

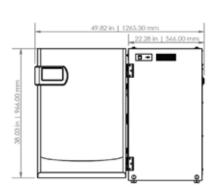


Features

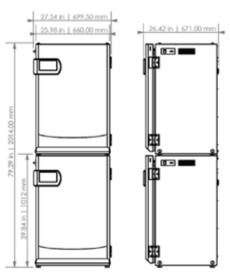
- Chamber HEPA air filtration provides class 100 purification Infra-Red (IR) sensor precisely and reliably detects CO2 concentration
- Easy sterilization process at 140°C dry heat
- Temperature controlled door prevents condensation and provides higher temperature stability and uniformity
- Intuitive 7" hi-res capacitive touchscreen
- Includes 4 shelves (can hold up to 13)
- Smart capabilities allow user to control CTI CO2 Incubator from a phone or tablet
- Visualize performance and changes over time with function performance graphs
- Audible and visual alarms alert user if parameters fluctuate outside set ranges
- 3 year warranty



Door Open



Double Stack



CO2 Incubator

Touchscreen Display

This touchscreen display is an intuitive and innovative user interface. On the main screen, parameters can be set, current values are displayed, and alarms will be displayed in real time. Customers can easily configure their setting preferences.



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Remote Monitoring App

Crystal Industries' AIREA[™] Remote Monitoring accessory and app give customers the ability to control their CTI CO2 Incubator right from their phone or tablet via a WiFi connection. Features of the Incubator app include the ability to set and change the incubator's parameters (including temperature and CO2 concentration). Text notifications are sent when an alarm is activated. This unique app makes it possible to stay conveniently connected with your CTI Incubator and ongoing projects, whether you are in the lab or not.

NEW: Orbital Shaker / Designed for CO2 Incubators



CO2 Incubator

Model	CI-191CXA
Product Name	AIREA™ CO2 Incubator 191L, Dry Heat Sterilization, Touch Screen
Capacity	191 L (6.75 cuft)
Temp. Range	Room Temp. Plus 5°C ~ 60°C
Temp. Accuracy	±0.1°C (@ 37°C) ±0.3°C max
Temp. Uniformity	±0.3°C (@ 37°C) ±0.6°C max
CO2 Sensor	IR
CO2 Concentration Range	0 ~ 20%
CO2 Concentration Accuracy	± 0.1%
Recovery Time after Opening Door	≤ 6 min (@37°C)
Relative Humidity Type	Natural Evaporation from Humidity Pan
Disinfection	140°C Dry Heat Sterilization
Disinfection Duration	12 Hours
Direction of Door Swing	Right
Display	7" Color Capacitance Touch Screen
Protection for Set Parameters	Password Protected
Data Display	7 days
Data Curve Display	Temp. Curve, CO2 Curve, RH Curve, Speed Curve (with CO2 Resistant Shaker)
Max Number of Shelves	13
Standard Number of Shelves	4
Shelf Dimensions (D x W)	472 x 472mm (18.85 x 18.85in)
Max Load per Shelf (When sliding in and out)	15 kg (33.06 lb)
Max Capacity using CIA24 Shelf	20 kg (40.09 lb)
Insulation	Dry-Wall
U Disk Download Date	Yes
Data Storage	Most Recent 912 Days of Data
Data Storage Increments	1 min
Data Storage Types	Time, Temp, Speed (with CO2 Resistant Shaker), RH,Machine Status
Auto-Run after Power Recovery	Yes
Noise Level	≤ 53dB
Water Sparge Resistant	Yes
Interface Languages	English / Chinese
Volume of Humidity Pan	3L
Power	≤ 1100W
Power Supply	AC 110V / 60Hz
Mobile Monitor and Wifi Control	Optional
PC Monitor and Control by RS485	Optional
Net Weight	125kg (275.58lb)
Outer Dimensions (D x W x H)	670.50 x 699.50 x 1012mm (26.40 x 27.54 x 39.84in)
Chamber Dimensions (D x W x H)	540 x 510 x 700mm (21.26 x 20.08 x 27.56in)
Temp. Alarm	Adjustable
CO2 Alarm	Adjustable
Chamber HEPA Filter	Yes



Accessories



CIA15 CO2 Inlet HEPA Filter 1 Year Service Life



CIA19 Remote Monitoring for CO2 Incubator



CIA24 Shelves CO2 Incubator



CIA13 Chamber HEPA Filter 1 Year Service Life



CIA28 Caster Wheels



CIA25 CO2 Cylinder Pressure Regulator

Benchtop Equipment Compatible with CI-191CXA:



MR-01UA/MR-03UA CO2 Resistant Mini Roller



OSC-26M CO2 Resistant Orbital Shaker (If using in CI-191CXA CO2 Incubator Shaker need to place on CIA24 Shelf.)

Sales & Product Support:

3727 Greenbriar Dr. Suite 304, Stafford, TX. 77477 866-674-7220 | 281-242-6294 info@bsilab.com

