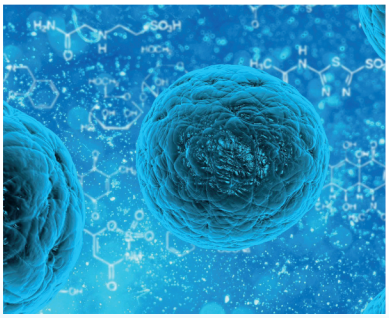
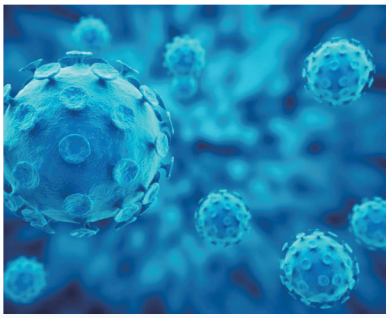
Crystal shaking incubator
IS-5 Series

- Large capacity, 450L
- Humidity control available
- CO_2 control available
- Stacked up to 2 units







Bring Technologies into Science!

www.crystalindustries.com | info@cti-eu.com

CRYSTAL

Introduction



- Large capacity, 450L
- Triple-eccentric counterbalance drive system with brushless DC motor
- 10'' high-res color touch screen with intuitive user interface
  Infra-red(IR) CO_2 sensor for precise and reliable CO_2 detection
- Optional Wifi and RS485 monitoring and control
- Stackable up to 2 units

IS-5 series shaker is designed to accommodate your incubation and shaking application with large capacity,which can be stacked up to 3 units.Available in a shaking diameter of 26mm or 50mm for a majority of applications.

	50ml	100ml	150ml	200ml	250ml	500ml	1000ml	2000ml	3000ml	5000ml
Max capacity Sticky mat IS-A47	187	112	104	84	77	40	28	15	15	8
Max capacity Flask clamp	135	60	60	60	60	38	24	15	12	6

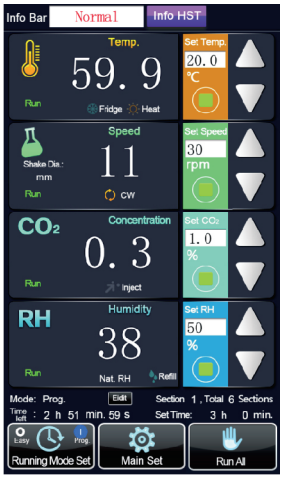
Applications

- Biological and chemical reactions with high requirements on temperature and oscillation frequency.
- Bacteria,fungi,yeast, algae culture and amplification.
- Animal cells,plant cells,virus culture (insect cells culture).
- Plasmid amplification,protein expression and amplification.
- Fermentation and hybridization.
- Applied in research fields such as biology,molecule,medicine , pharmacy,food, environmental protection, etc

Features

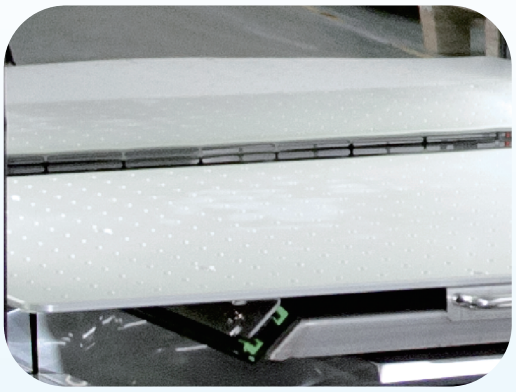
Intutive Touch Screen

- 10'' LCD touchscreen
- Automatically lock and password protection
- User-friendly interface with simpe and clear function module



Triple-eccentric Counter Balanced Mechanism and DC Brushless Motor Drive

- Provide smooth and stable shaking for heavy and even loading
- Maintenance-free Brushless motor Drive provides high efficient and reliable operation
- Low noise and longer service life



Temperature Control

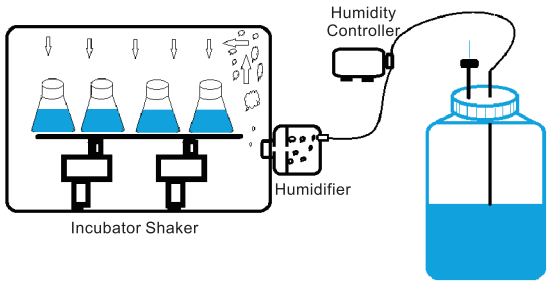
- Combined PID and Fuzzy Control Technology to ensure temperature accuracy at ±0.1°C
- Highly efficient inverter compressor refrigeration allows for cooling as low as 18°C below room temperature with low energy consumption (minimum temperature at 4°C)
- Program mode allows user to set up to 12 segments of varying temperature and speed

CO_2 Control with Infrared (IR) sensor

- Infrared Sensor,drift free
- Keep CO_2 concentration between 0-20%

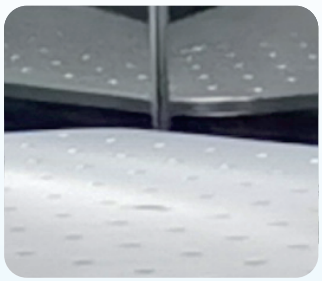
Humidity control (OPTIONAL)

- Set at 10% above ambient humidity,up to 90%
- No evaporation, no contamination in the chamber
- No condensation produced



Hygiene

- Rounded inner corners make easy to clean
- Drain port at back
- UV light





Slide-out platform

- Easy to make the operation

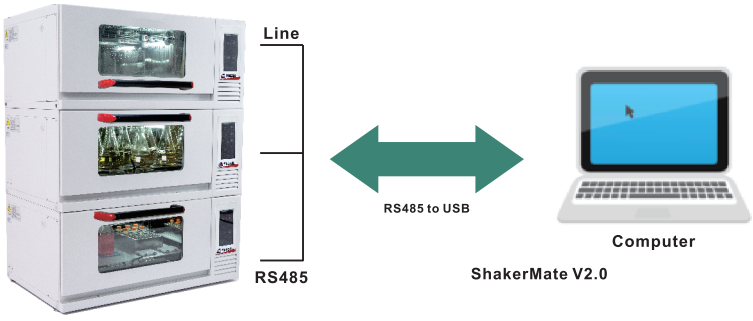


Features

Monitor & control system &App (Optional)

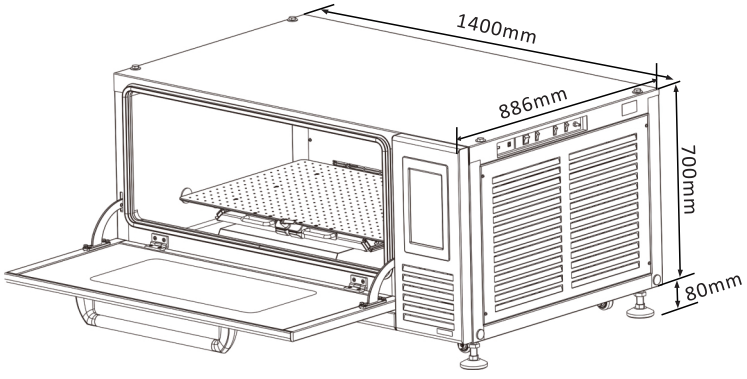


Computer monitoring software for incubator shaker (Optional)

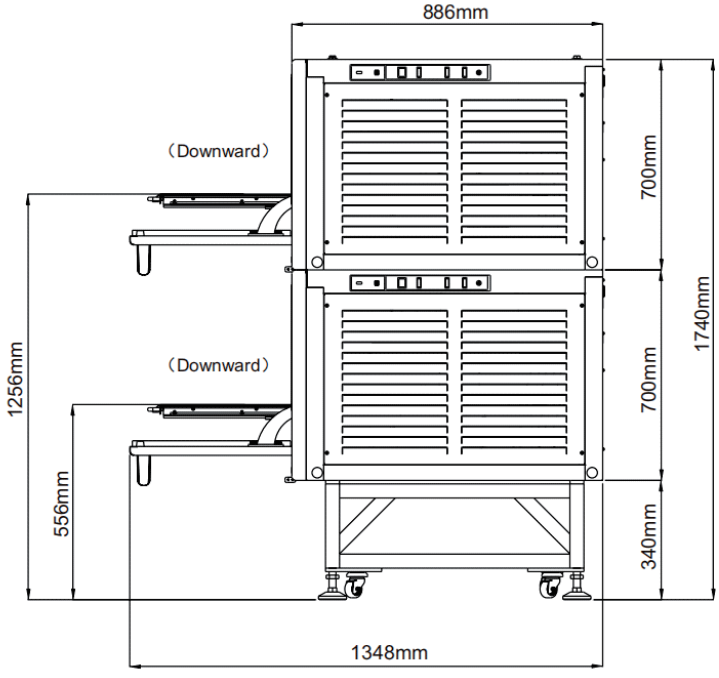


Prodcution Dimension

1 down-swing-door instrument



•Trestle and 2 down-swing-door instruments are stacked as below:



Specification

Shaking Control	
Drive mechnism	DC brushless motor with belt
Shaking platform	aluminum, 900x560mm
Shaking orbit	26mm or 50mm
Loading max	30kgs, depends on shaking speed and diameter
Speed range	0, 30~300rpm
Setting accuracy	1 rpm

Temperature	
Cooling	Yes
Range	18°C below ambient temperature, minimum 4°C to 60°C
Setting accuracy	±0.1°C
Uniformity	±0.5°C (@37°C)
Recovery time after door opening 30 seconds	≤6min (@37°C)

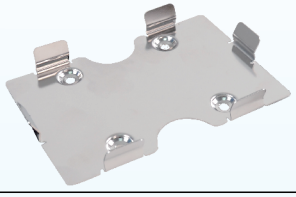
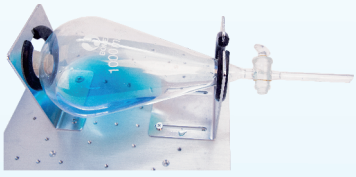
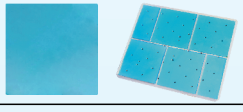
CO_2 (if available)	
CO_2 sensor	IR
Setting range	0-20%
Setting accuracy	0.001
CO_2 supply pressure	0.08-0.1Mpa
Recovery time after door opening 30 seconds	≤6min (@5%)

Humidity (only available with CO_2 models)--Natural evaporation	
Humidity type	Natural evaporation with a humidity tray
Max humidity	95%(with humidity tray)
Automatic water refill	N/A in standard configuration. Optional accessory IS-A71

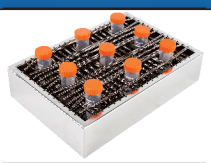
Humidity (only available with CO_2 models)--Active humidity (Optional)	
Humidity type	Active humidity with RH control system IS-A72
Humidity set accuracy	±1%
Humidity control Accuracy	±5%
Max humidity	10% above room humidity, up to 90%

General data	
Programmable	Yes, 12 segments
Illumination	LED
Disinfection	UV lamps
Door opening direction	Downward
Display	10“ touch screen
Timer	0~999h59m
Data export	USB
Auto-defrost	Yes
Platform movement	Pull out
Noise level	≤55dB(When compressor is running)
Max power consumption	1000W
Power when heating	≤850W
Power when cooling	70-230W
Power supply	AC 220V±22V,50Hz/60Hz
Incubation gas volume	450L
Material incubation chamber	304 Stainless steel
Material outer chamber	Painted stainless steel
Net weight	325kg
External dimension	1400x886x(700+80 feet high)mm
Internal dimension	1005x784x635mm
Platform dimension	900*560mm
Useful working height	430mm

Optional Accessories

Model	Name	Specifications	Max Qty	Figure
IS-A50	Flask Clamp	25ml	135	
IS-A1		50ml	135	
IS-A2		100ml	60	
IS-A3		150ml	60	
IS-A4		200ml	60	
IS-A5		250ml	60	
IS-A6		500ml	38	
IS-A7		1000mi	24	
IS-A8		2000ml	15	
IS-A9		3000ml	12	
IS-A11	Test Tube Rack	40 xΦ 14mm	9	
IS-A12		40 xΦ16mm	9	
IS-A23		40 xΦ18mm	9	
IS-A24		27 xΦ22mm	9	
IS-A42		21 xΦ30mm	9	
IS-A20	Adiustable TestTube Rack	40 xΦ 14mm	9	
IS-A21		40 xΦ16mm	9	
IS-A30		40 xΦ18mm	9	
IS-A31		27 xΦ22mm	9	
IS-A32		21 xΦ30mm	9	
IS-A37		24 xΦ30mm	9	
IS-A13	96-well Microplate Holder	96-well	30	
IS-A35	Fixture Separating Funnel		4	
IS-A33	Infusion Bottle Clamp	500ml	40	
IS-A34	Infusion Bottle Clamp	1000ml	28	
IS-A47	Self-Adhesive Silica Mat	140x140mm	24	
IS-A62	Rack for Stacking Incubator Shakers	1400x737x30mm	1	

Optional Accessories

Model	Name	Specifications	Max Qty	Figure
IS-A63	Spring Platform of Large-capacity stackable incubator shaker	900x540x80mm	1	
IS-A39	Mu1tifunction Spring Platform	720x440x80mm	1	
1S-A27		350x240x80mm	4	
1S-A22		450x400x80mm	1	
IS-A14		428x295x80mm	2	
IS-A80	Window Shade	702x352mm	1	
IS-A71	Automatic Water Replenishing Device	AC110~240V, 50/60Hz	1	
IS-A72	RH Controller	AC 220V±22V, 50/60Hz	1	
IS-A90	Water Tank	449x240x240mm	1	
IS-A64	Remote Monitoring for Incubator shaker (With APP)	210x142x210mm	1	
Shaker Mate V2.0	Computer remoting software system		1	

How to choose the model?

Model	Orbital Diameter		CO_2
	26mm	50mm	
IS-5	√	×	×
IS-5C	√	×	√
IS-5C5	×	√	√