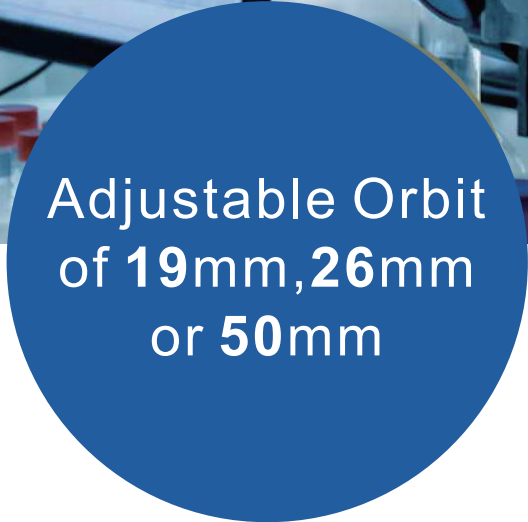




Axotron

Stackable Incubator Shakers(400L) With Magnetic Drive IS-6MV Series

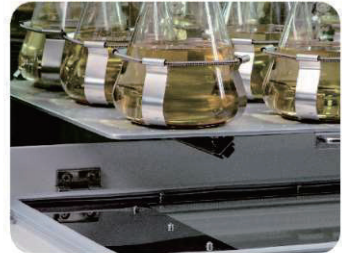


Adjustable Orbit
of 19mm, 26mm
or 50mm



Axotron

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Direct Magnetic drive system delivers efficient, quiet, and durable performance while generating minimal heat, ensuring it does not impact the chamber temperature.

Key features:

- ◆ Triple-eccentric counterbalance drive system
- ◆ 10" High-Res Color Touch Screen with intuitive user interface.
- ◆ Cooling as standard function, with ± 0.4 Temp uniformity.
- ◆ Stackable design, available either single unit or even stack up to 3 units.
- ◆ Loading capacity: 8×5 L Thomson and Corning plastic flasks with sticky mat
- ◆ Max loading: 20kgs at 350rpm; max 30kgs at 220rpm for 25mm orbit.
- ◆ Set of UV lights on both side for easy sterilization
- ◆ Adjustable orbit of 19mm, 26mm and 50mm

	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	/

► Please be kindly noted that above max capacity is for Erlenmeyer flasks, except 5000ml, it is Thomson flask

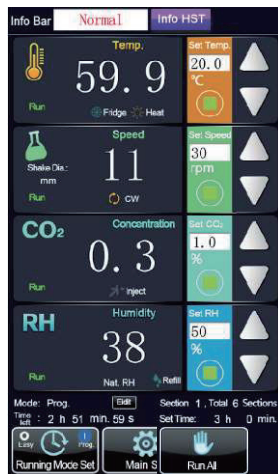
Applications

- 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

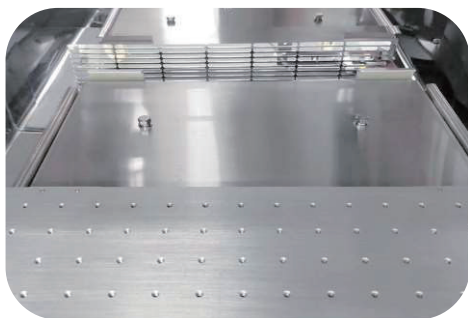
Intuitive Touch Screen

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



Drive Unit

- Sealed magnetic drive is highly efficient, quiet, durable, and produces negligible heat that does not affect the chamber temperature
- Three axis eccentric balance system provides stable and reliable shaking
- Eliminates the need for belt replacements and has a longer lifespan than motor drive



Temperature Control

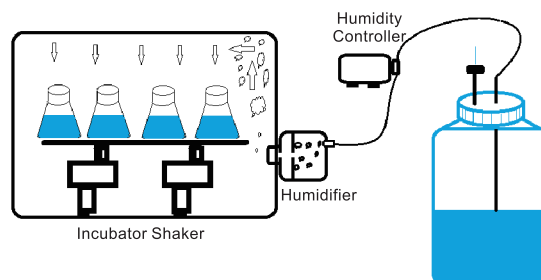
- Combined PID and Fuzzy Control Technology to ensure temperature accuracy at $\pm 0.1^{\circ}\text{C}$
- Highly efficient inverter compressor refrigeration allows for cooling as low as 18°C below room temperature with low energy consumption (minimum temperature at 4°C)
- Program mode allows user to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

CO₂ Control with Infrared(IR) sensor

- Infrared Sensor, drift free
- Keep CO₂ 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



Data Management

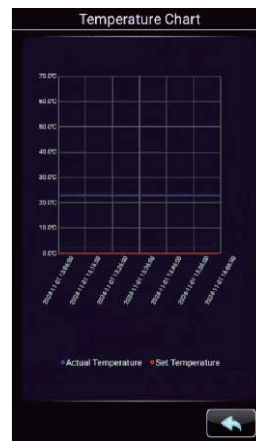


Data Management

Multiple solutions for data access

1. Data on display

Check the data history of your device and view informative graphs on screen display. The data can be traced up to 7 days.



2. Built-in USB port for fast and easy data export

Data can be stored up to 2 years

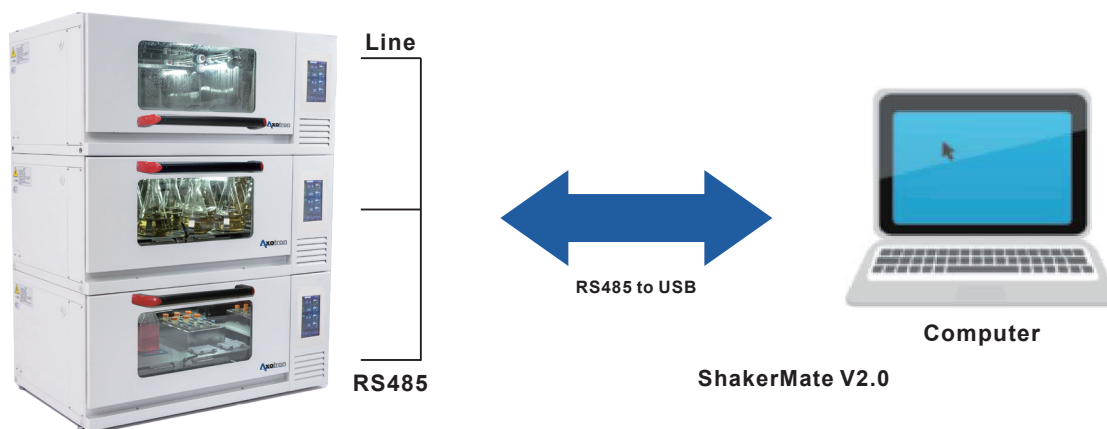


3. Modbus RTU or Modbus TCP/IP

Provide communication protocol to Intergrate with user's monitoring system.

Data Management

- ◆ Computer monitoring software
Comply with FDA21-CFR-PART 11 and GMP regulation



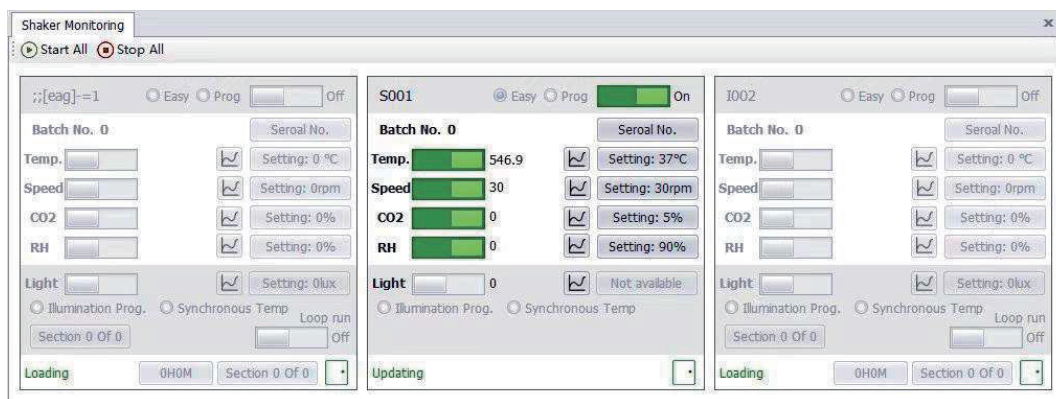
◆ Description

ShakerMate is a computer software which is used for monitor and control the incubating shaker in LAN. A computer can monitor and control all the parameters of multiple machines, all settings change and related account operations on the machines could be recorded to the log file. The running data of the machine can be recorded every minute and stored in the database file, and the stored data can be exported to be a file, meet the requirements of FDA. It is very suitable for the requirement of records for both culture and operation.

◆ Features

- One computer can monitor and control up to 32 shakers at the same time.
- Computer can program to the machine and let the unit run as several section programs (the max. is 12).
- Arbitrary operation and machine data are recorded in log files and database files respectively, it can meet the data traceability requirements of FDA.
- Send a message to the machine's alarm information to the designated mobile phone.
- Computer can monitor and control the temperature, speed, humidity, CO₂, light and other parameters of the shaker through the LAN.
- Historical data reports can generate temperature, speed, CO₂ concentration, and humidity curves to see if there are any anomalies at a glance.

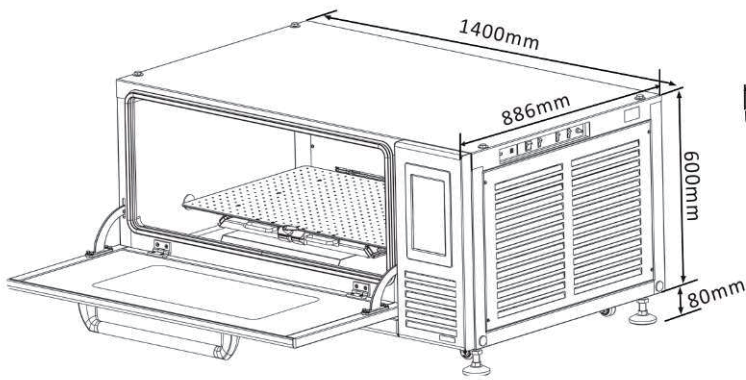
[PC software user interface]



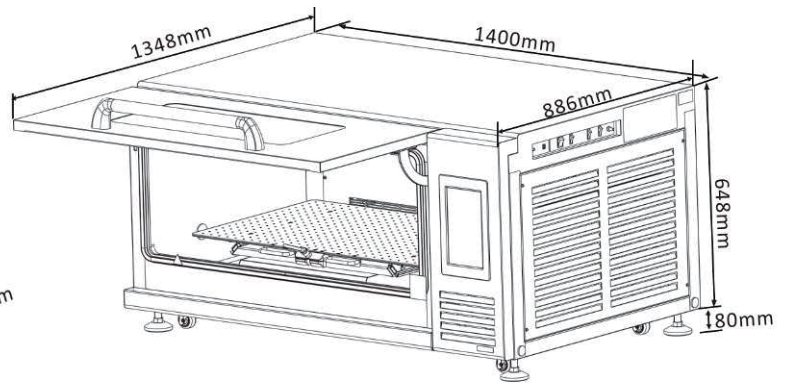
Comply with FDA 21-CFR-PART 11 and GMP regulation

Production Dimension

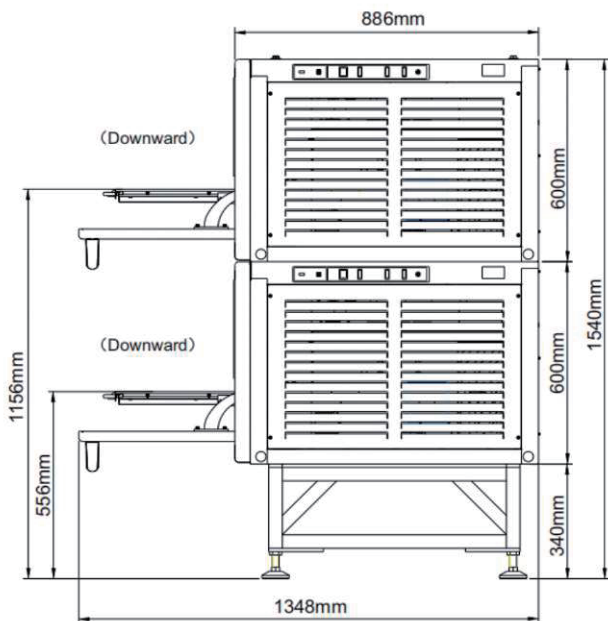
• down-swing-door instrument



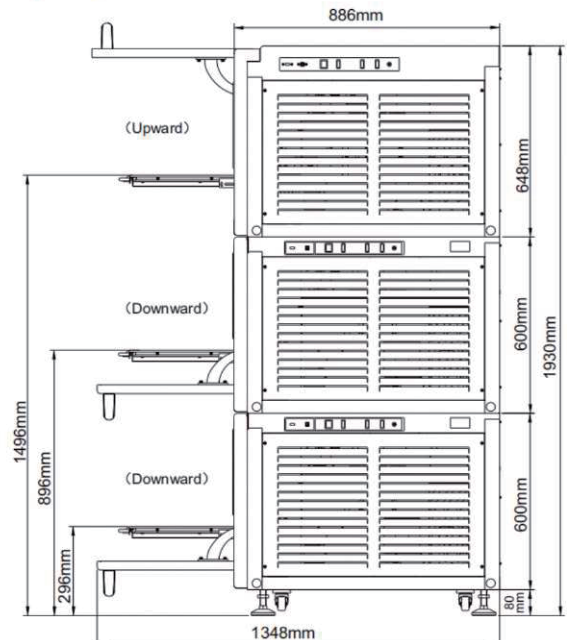
• upward-swing-door instrument



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



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



Specification

Shaking Control	
Drive mechanism	DC brushless motor with belt
Shaking platform	aluminum, 900x520mm
Shaking orbit	Adjustable, 19mm, 26mm and 50mm
Loading max	30kgs, depends on shaking speed and diameter
Speed range	0, 30~350rpm
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	±0.4°C (@37°C) without CO ₂ , ±0.3°C (@37°C) with CO ₂
Recovery time after door opening 30 seconds	≤6min (@37°C)

CO₂ (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 CO₂ 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 CO₂ 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 or Upward
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	70-180W
Power supply	AC 220V±22V,50Hz/60Hz
Incubation gas volume	400L
Material incubation chamber	304 Stainless steel
Material outer chamber	Powder coated carbon steel
Net weight	270kg
External dimension	1400x886x(600+80 feet high)mm
Internal dimension	1005x784x535mm
Useful working height	335mm