

## About the Shaker Incubator

The **FIDELS/175-FS** Orbital Shaker Incubator provides precise temperature control and smooth shaking for efficient microbial and cell culture growth. Built with a durable stainless-steel chamber, user-friendly touch controls, and reliable low-noise performance, it ensures consistent results for routine and advanced lab applications.

### Key Features:

- Useful for biological culture under various temperatures
- Inside material is SUS304 and outside body is powder painting
- Screen-touch panel
- The compressor will be delayed to start working if power cut and with timer for defrost.
- With safety switch to stop shaking when opening door
- Three-point bearing transmission is adopted suitable for heavy loads and continuous duty.
- Minimum noise, no vibration.
- Refrigeration using non cfc gas R134A
- Optional day/night light with timer.
- Transparent glass observation window and internal light.
- Provide clear visibility without opening the door.
- Uses brushless AC motor for long durability and stable performance of the shaking system.
- Overheat and over low protector, built-in circulating fan for temperature stability.



Model	FIDELS/175-FS
Temp. range	0°C~70°C
Temp. Accuracy	±0.1°C
Temp. control	PID
Temp. Display	LED 2-screen digital display actual and setting temperature
Speed Programmer (9 steps)	20~250 rpm (option 400 rpm)
Shaking width	25 mm
Timer	999h / 999min / 999sec
Heater	900 W each chamber
Refrigerator	1/4HP
Volume	Each chamber 175L
Shaking Plate Size (mm)	640x440
Inside dimensions (mm)	W700xD500xH500
Outside dimensions (mm)	W780xD690xH1720
Shelves	1 Adjustable
Weight (Approx.)	170Kg

Model	111-1-110125	111-1-110250	111-1-110500	111-1-111000	111-1-112000	111-1-113000	111-1-114000	111-1-115000
Flask clamps	125ml	250ml	500ml	1000ml	2000ml	3Liter	4Liter	5Liter
FIDELS/175-FS	40	28	20	12	6	6	2	2

## Features

### 1. Useful for biological culture under various temperatures

- This incubator is specially designed to support a wide variety of biological and microbiological cultures. It provides a stable environment with precise temperature control, allowing users to grow bacteria, yeast, cell cultures, and other organisms efficiently under different temperature conditions.

### 2. Inside material is SUS304 and outside body is powder painted

- The inner chamber is built from high-quality SUS304 stainless steel, offering excellent corrosion resistance and long-lasting durability. The outer body is coated with high-strength powder paint, which protects the equipment from chemical exposure, scratches, and wear over extended use.

### 3. Screen-touch panel

- A modern touch-screen interface allows users to set and monitor temperature, shaking speed, and timing parameters easily. The clear display and intuitive menu enhance user convenience and accuracy during operation.

### 4. Compressor will be delayed to start after power cut & includes timer for defrost

- To protect the cooling system, the compressor automatically delays its restart after any power interruption. This prevents overload and increases compressor life. In addition, the unit is equipped with a programmed defrost timer that ensures efficient and consistent cooling performance.

### 5. Safety switch to stop shaking when door is opened

- For user protection, a built-in safety switch instantly stops the shaker mechanism whenever the door is opened. This avoids accidental contact with moving parts and helps maintain overall operator safety.

### 6. Three-point bearing transmission for heavy loads & continuous duty

- The shaking platform uses a robust three-point bearing transmission system. This design supports heavy sample loads and ensures stable, continuous, long-duration operation without performance loss.

### 7. Minimum noise, no vibration

- The incubator's advanced mechanical design minimizes operational noise and eliminates vibration. This ensures a quiet working environment and prevents disturbance to sensitive cultures.

### 8. Refrigeration uses non-CFC gas R134A

- The cooling system uses eco-friendly R134A refrigerant, which is free from ozone-depleting chemicals. This makes the incubator environmentally safe and energy-efficient.

### 9. Optional day/night light with timer

- The unit can be equipped with an optional day/night lighting system. The included timer allows controlled illumination cycles, enabling observation of cultures without affecting their growth conditions.

### 10. Transparent glass observation window and internal light

- A clear viewing window combined with internal illumination allows users to check culture status without opening the door. This helps maintain stable temperature and prevents unnecessary exposure of samples to external conditions.

### 11. Provides clear visibility without opening the door

- The glass window and lighting system offer excellent visibility of the chamber interior, reducing the need to open the door frequently. This helps preserve the controlled incubation environment.

### 12. Uses brushless AC motor for long durability & stable performance

- The shaker is powered by a brushless AC motor, known for its long operational life, low maintenance, and smooth, stable shaking performance even under continuous use.

### 13. Overheat & low-temperature protector with built-in circulating fan

- For added safety, the incubator includes over-temperature and low-temperature protection systems. A built-in circulating fan ensures uniform airflow and stable temperature distribution throughout the chamber.