

# BACTERIOLOGICAL INCUBATOR

## AVI-109 SERIES



A Bacteriological incubator is used to provide a controlled environment in which the growth of bacteria or other microorganisms can be promoted. A constant temperature is maintained within the unit and hot air circulates over the racks and shelves containing the Petri dishes or flasks.

AVANTE Bacteriological Incubators are non-refrigerated variants of Cooling Incubator. They are produced specifically to administer life cycle testing, shelf-life studies, general incubation, etc. They are loaded with advanced technology as they provide you with the option to change temperature ranging from 5.0°C above ambient to 60.0°C. The temperature is operated by a microcontroller-based system. The cabinets of bacteriological Incubators are used for seed testing, biological studies, etc

### CONCEPTION

The interior working chambers of Avante Bacteriological Incubators are coated with high-density CFC free

Polyurethane foam. The interiors are mirror finished and made of stainless steel (304 SS, 0.8 mm thick). The exterior consists of white powder-coated (1.0 mm thick) with mild steel. The doors of these cabinets come with a magnetic gasket and a keyed door lock. Trays made using stainless steel are provided inside the chambers to ensure optimum storage.

GMP models are completely built with stainless steel (Interiors S. S 304 with a mirror finish and exteriors. S.S 304 dull finish. Inner S.S316 is also available upon request on extra cost).





### BACTERIOLOGICAL INCUBATOR FINDS TEST APPLICATIONS IN

- Cosmetic Industry
- Clinical Lab
- Chemical Lab
- Engineering Lab
- Food Processing
- Microbiological Determination
- Pharmaceutical Stability Assays

### SAFEGUARDING TRAITS

- An MCB to prevent short-circuiting in case of power fluctuation
- An audio-visual alarm that buzzes to pass alerts when the temperatures change from the set temperature.
- Automatic cut-off to ensure safety when the temperature crosses 60 degrees celsius.
- GSM technology available to receive mobile alerts

### TEMPERATURE CONTROL SYSTEM

- A keypad lock safeguarded with a password key
- Audiovisual alarm to send alerts when the temperature shifts from the regular temperature.
- A visual alarm when the sensor gets faulty
- LED Display with 4-digit and 7 segment
- Set and process temperature display
- Temperature based alarm system that indicates changing high and low temperatures
- Temperature control based on a Microcontroller system

### PRINCIPLE CHARACTERISTICS

- An external validation port of 50mm  
A safety cut-off system in case the temperature exceeds the set values
- Even distribution of temperature is ensured with the help of a specially designed solid stainless steel wire mesh trays
- Easy movement using castor wheels
- LED Lighted working area
- Other optional accessories available by choice
- Premium PT-100 sensor to ensure the correctness of results
- Stainless steel tubular heater in U-shape
- Stable temperature and energy efficiency ensured with foamed in place CFC PUC insulation
- The uniformity of temperature inside the oven and quick recovery after the doors are opened is guaranteed using Unidirectional airflow system
- Transparent acrylic inner door



## DISCRETIONARY ACCESSORIES

### Data scanner

8/16 programmable data scanner to register, save and print data online as well as offline with different print intervals, compatible with 80 col. Dot Matrix Printer.

### PLC system

Programmable Logic Control system comes with a safety controller, auto conversion of Standby systems and several other procedures handling options. It also includes ethernet connectivity, security locks to avoid unauthorised alterations and a 4.3 Colour HMI with a touchscreen. Ethernet connectivity and safety lock to avoid any unapproved changes.

### PC interface communication

This includes a PID controller based on a microcontroller to record, store, print the set values and process values. It also shows date and time with different print timings with RS-485 communication.

**Power Backup** In case of power failure, the uninterrupted online power supply is provided for PLC.

**Trays** An extra tray compatible with above-mentioned accessories as per your need

**Mobile alert** if the system stops working, Mobile alerts will be received via GSM technology.

**Door access** To keep a log record, biometric magnetic door access is available for safely opening the door with the help of a software.

**Light bank** The cabinets have LED light banks to study photosynthesis

**Ultraviolet lamp** LED lighted cabinets with UV-C lamp to keep them clean and hygienic from inside



### ALERT MANAGEMENT:

- SMS alert message can be send to 5 users with notifications
- Email alert can be sent to 15 users with notifications
- Call alert can be send to 5 users with voice messages with notifications





## TECHNICAL DATA

Cat. No.	AVI-109A	AVI-109B	AVI-109C	AVI-109D	AVI-109E	AVI-109F	AVI-109G	AVI-109H	AVI-109I
	AVI-109A-G	AVI-109B-G	AVI-109C-G	AVI-109D-G	AVI-109E-G	AVI-109F-G	AVI-109G-G	AVI-109H-G	AVI-109I-G
	AVI-109A-P	AVI-109B-P	AVI-109C-P	AVI-109D-P	AVI-109E-P	AVI-109F-P	AVI-109G-P	AVI-109H-P	AVI-109I-P
	AVI-109A-GP	AVI-109B-GP	AVI-109C-GP	AVI-109D-GP	AVI-109E-GP	AVI-109F-GP	AVI-109G-GP	AVI-109H-GP	AVI-109I-GP
Volume	100 Liters	200 Liters	300 Liters	400 Liters	600 Liters	800 Liters	1000 Liters	1500 Liters	2000 Liters
Temperature Range	5°C above ambient to 60°C								
Accuracy	± 0.5 °C								
Uniformity	±1.0 °C								
Control system	Micro control / PLC								
No. Doors	Single	Single	Single	Single	Single	Double	Double	Double	Double
No. Of tray	2	3	4	4	4	8	8	10	10
Power	500 W	500 W	500 W	500 W	750 W	1000 W	1500 W	1500 W	1500W
Voltage	230 ACV , 50/60Hz								
	DIMENSIONS (W X D X H ) IN MM AND WEIGHT (KG)								
Internal Dim	435x400x600	505x400x1005	565x450x1205	635x530x1205	745x670x1205	1120x600x1205	1150x670x1300	1300x890x1300	1500x1030x1300
External Dia	580x845x1275	650x880x1680	710x935x1885	780x1010x1880	890x1150x1960	1370x1075x1920	1400x1145x1920	1550x1365x1920	1750x1505x1920
Packing size	707x972x1478	777x1007x1883	837x1062x2088	907x1137x2083	1017x1277x2163	1497x1202x123	1527x1272x23	1677x1492x2123	1877x1632x2123
Net Weight	120	145	200	255	280	310	335	360	380
Gross Weight	175	225	275	325	350	400	425	450	480

Note: The design, color, specification, and models are subject to transformation due to ending research, development, and technological advances.

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