



# INCUBATOR SHAKER



## Quality, Management, Environment, Health & Safety Standards



CDSCO MD 5 License



USFDA Listed



European CE



ISO 9001: 2015  
IAF



ISO 13485:2016  
NABCB/IAF



ISO 45001 : 2018  
IAF



7 Electric Safety Certifications  
IEC 60335-1 and IEC 60335-2-24, IEC 61010-1,  
IEC 61010-2-020 and 61010-2-101, IEC 61326-1,  
IEC 61326-2-6.

## INTRODUCTION

The MarkEn Incubator Shaker is a high-performance laboratory system combining precise temperature control with uniform orbital agitation for reliable culture growth. Designed for research, biotechnology, and pharmaceutical applications, it delivers consistent incubation conditions, programmable flexibility, and dependable long-duration operation making it ideal for high-throughput and critical microbiological processes.



## SALIENT FEATURES

### 1. ROBUST CONSTRUCTION

- Stainless steel 304 inner chamber ensuring corrosion resistance and easy cleaning
- Durable outer body with powder-coated or SS 304 finish
- Stackable design allowing installation up to two units high

### 2. HIGH-PERFORMANCE ORBITAL SHAKING

- True orbital motion ensuring uniform mixing
- Wide speed range suitable for bacterial, yeast, and cell culture applications
- Large platform accommodating multiple flask sizes up to 5 L

### 3. INTELLIGENT MICROPROCESSOR CONTROL

- Digital microprocessor-based control system
- Multi-step programmable operation (minimum 15 steps per program)
- Storage capability for multiple independent programs
- Automatic restart with flashing display after power restoration

## 4. TEMPERATURE STABILITY & ILLUMINATION

- Operating temperature range from +5°C to +70°C with accuracy  $\pm 0.1^\circ\text{C}$
- Accurate temperature regulation for reproducible incubation
- Multi-step programmable operation (minimum 15 steps per program)

## 5. CAPACITY & FLEXIBILITY

- Supports large-volume flasks and high-density culture batches
- Compatible clamps for 250 ml, 500 ml, 1 L, and 2 L Erlenmeyer flasks
- High flask holding capacity for parallel processing

## 6. CONNECTIVITY & MONITORING

- Serial communication interface for remote monitoring and control
- Remote data logging capability
- Upgrade provision for real-time parameter notification and monitoring
- Non-volatile memory for data and set-point retention

## 7. SAFETY & OPERATIONAL RELIABILITY

- Designed in compliance with applicable electrical and environmental safety standards
- Power interruption recovery with parameter retention
- Clear operational status indication

## 8. POWER BACKUP PROVISION

- Provision for suitable online UPS system with minimum 1-hour backup
- Ensures uninterrupted operation during power fluctuations
- Supports protection of programmed parameters and ongoing incubation cycles

## TECHNICAL SPECIFICATIONS

|                                  |  |
|----------------------------------|--|
| <b>Make</b>                      | MarkEn   |
| <b>Inner Chamber Material</b>    | Stainless Steel 304                                  |
| <b>Outer Body Material</b>       | Powder Coated Steel or SS 304                        |
| <b>Shaking Speed Range</b>       | 20–400 rpm   |
| <b>Motion Type</b>               | Orbital, minimum 19 mm orbit diameter                |
| <b>Timer Range</b>               | 1 hour to 99 hours 59 minutes                        |
| <b>Control System</b>            | Microprocessor-based digital controller              |
| <b>Display</b>                   | Large LED digital display                            |
| <b>Maximum Flask Capacity</b>    | 8 × 1000 ml  |
| <b>250 ml Flask Capacity</b>     | Minimum 30 flasks                                    |
| <b>Temperature Range</b>         | +5°C to +70°C with accuracy ±0.1°C                   |
| <b>Illumination</b>              | Internal LED light                                   |
| <b>Programmable Steps</b>        | Minimum 15 steps per program                         |
| <b>Program Storage</b>           | Minimum 3 stored programs                            |
| <b>Connectivity</b>              | Serial communication interface for remote monitoring |
| <b>Memory Retention</b>          | Non-volatile memory for set parameters               |
| <b>Auto Restart</b>              | Yes, after power restoration                         |
| <b>Stackable Configuration</b>   | Up to 2 units high                                   |
| <b>Flask Clamp Compatibility</b> | 250 ml, 500 ml, 1 L, 2 L                             |
| <b>Platform Clearance</b>        | Suitable for flasks up to 5 L capacity               |
| <b>Power Supply</b>              | 220–240 V AC, 50/60 Hz                               |

## CERTIFICATIONS



Intertek

9 products tested by a WHO-accredited laboratory



ISO 14001: IAF



WHO GMP


 BIFMA Certified,  
 BIFMA Level 3

 ASTM- Corrosion  
 Free Products

 ISO 2409  
 ISO 9001  
 ISO 13849  
 ISO 13485  
 ISO 14001  
 ISO 45001

 EN 13523-26,  
 ISO 13849-1,  
 IP 69, IP 65

 **Regd office & Factory:** 93/1, MIDC Satpur, Nashik- 422007 (IND)

 **New Delhi office** - 05, A-44, VDS Tower, Sector 2, Noida- 201301. UP. India

 **Customer Care No.**+91 91 3030 5959

 **www.markenworld.com**  **info@markenworld.com**

