# (COLO



The COLO MBINHT incubators are designed to be the ultimate device in your laboratory where you can, under precise temperature conditions, cultivate bacteria for microbial testing, incubating of cell cultures for in vitro fertilization... Precision temperature sensor, programmable thermo controller, interior and exterior made of high quality materials, will give your work precision and comfort. Forced air circulation microprocessor controlled, provide high temperature uniformity in chamber and protect your samples. High quality corrosion resistant material is ideal for easy cleaning and long term exploitation.

- free
- Corrosion resistant Stainless Steel 304 chamber with seamless round cornered edge allows easy cleaning and prevent leakage
- Temperature range is divided into three zones (low/middle/high)
- range
- Back light graphic LCD display provides user-friendly operating information
- Capacitive LED lighting touch button provides sensitive touching operation and durability • Temperature and timer memory function
- Audio and visual alarm for PT sensor
- Audio and visual alarm for high temperature +5°C above the set value and for low temperature -5°C below the set value
- Dual protection against overheating via a heater cut-out using a controller and an independent analog thermostat

## **RT+5°C to 70°C**



### **Smart air circulation**



#### **Intelligent PID controller**

Microprocessor controlled temperature provide minimum temperature deviation



#### **3- zone PID algorithm**



#### **Double over heating protection**

Additional double heating protection, prevent samples overheating and loss it



#### **Double tempered glass door**

Tempered glass door 5 mm thick

#### MBINHT Laboratory Incubator RT+5°C to 70°C

• Forced air circulation for excellent thermal accuracy and uniformity

• Aero-dynamic chamber designed with circulation blower to achieve superior thermal uniformity • Separate heating compartment located on back wall for contamination free and maintenance

• Metal housing protected with an epoxy anti-corrosion finish

- Tempered safety inner glass door, 5 mm thick, for easy observation of samples
- Each zone has its individual PID algorithm to provides precise and superior temperature control characteristic of whole temperature range
- Three-point temperature calibration that provides better accuracy over the entire temperature

• Integrated digital microprocessor PID temperature control system

- Programming up to 10 steps of operation at different temperatures and times with the
  - possibility of repeating up to 999 times
- Circuit breaker for protection against excessive current

• Logging temperature with a data logger in the temperature range of RT +5°C to +70°C, with a minimum interval of 10 seconds. Memory capacity of 32,000 temperature records with a resolution of 0.1°C. Integrated NTC thermistor temperature control sensor with a minimum accuracy of ±0.5°C (in the range of -20 to +40 °C). Data transfer to PC via USB connection. Creation of temperature reports in PDF format (optional)

Incubator Type	MBINHT55	MBINHT90	MBINHT150	MBINHT200	MBINHT270	
Volume Litre	54	88	150	200	270	
Air Circulation		Forced Air Circulation (Convection)				
Temperature range	RT+5 - 70°C					
Temperature accuracy at 37°C	.±0.2°C					
Temperature uniformity at 37°C	.±0.5°C					
Heat-up time to 37°C		15 min				
Temperature motion		High Temp. : ±0.5°C				
Temperature display resolution		0.1°C				
Display type		Graphic LCD display with back light				
Temperature control mode		Three temperature zone PID algorithm, three point calibration				
Auto start timer with alarm		1 min ~ 99 hour 59 min				
Auto stop timer with alarm		1 min ~ 99 hour 59 min				
Audio and visual alarm for open door		Yes				
Test hole		Ø52mm Ø43mm				
Housing		Metal housing protected with an epoxy anti-corrosion finish				
Temperature sensor		Class A PT-100 Ω				
Inner glass observation window		Yes				
Self-diagnostic function		Yes				
Operation function	Temperature settings, timir	Temperature settings, timing function, auto stop, internal parameter locking, temperature correction, auto tuning, parameter memory in the case of electrical cut off, over temperature sound and light alarm				
Standard shelf number		2 by 25mm spacing				
Optional shelf number (max)		9			12	
Load per shelf (max)		15kg				
Voltage		220V±10%/50-60Hz				
Power consumption	160W	210W	260W	410W	645W	
Inner chamber size W*D*H mm	395*346*395	500*364*500	500*500*600	598*638*548	660*450*850	
External size	536*588*681	650*573*793	680*735*920	725*809*830	802*743*1440	
GV kg	51	72	100	101	102	
Standard Temperature Certificate		At 40°C in the chamber centre Issued by COLO technical service				
Temperature certificate (optional)		One or multi point temp, mapping, issued by accredited laboratory				
Optional accessories		Shelf, RS485 interface, Printer, Data logger, Program Temperature Control device, Remote control, Wi-Fi Smart phone control, Temperature Controller with ramp settings, USB data storage, Touch Screen Display, Calibration certificate, Service Certificates,				

#### Please note

If this Incubator does not match the specific needs of your application, or some options are not listed for sale, please feel free to contact us. Our manufacturing engineers will come up with technical solutions to meet your needs. We reserve the right to change technical specifications at any time.

#### **COLO** LabExperts

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