

CO₂ INCUBATOR WITH BUILT-IN ROLLER OR SHAKER (NB-203QR/NB-203QS)

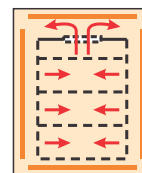
Roller apparatus or Shaker is mountable on the bottom of chamber. Adherent and Suspension Cell culture are simultaneously conducted at an incubator. All operation for built-in apparatus is controlled at external control panel.



NB-203QR



NB-203QR Inside



Natural Air and Moisture Convection
Air and Moisture in chamber are distributed naturally by 6 side heating, air circulation fan.



Perforated Shelves are good for natural air flows as well stainless are resistant against rust and contamination.



Rounded Conner allows easy cleaning. Entire chamber is made of stainless steel(SUS304)



Over Heating Limit. Heating is automatically cut by safety device when temperature control failed or excessive heating over set point.

Accessories

Detail about accessories is written at the end of section.



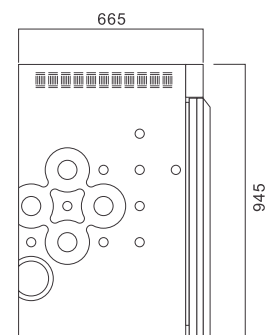
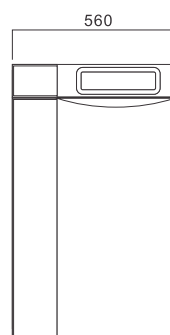
GAS Regulator



CO₂ Analyzer



SHELVES



Features

- **6 Sides Direct Heating System**
Electric Heating wire is covered on all sides of chamber which makes stable uniformity and provides fast heat-up & temperature recovery. 3 parts of heating section are controlled and calibrated individually by 3 temperature sensors. In
- **Dry Wall and Air Jacket**
Warm Air from heating wire is preserved in space between chamber and insulation. It helps temperature recovered faster and minimize heat loss. Dry wall with insulation is not required to regular maintenance.
- **DUAL BEAM IR CO₂ Sensor**
Fast & Precise Detection for CO₂ gas regardless temperature and humidity.
- **Natural Humidification using Water Tray**
The heater on bottom side warm the water in tray and it makes humidification. Circulation fan deliver the moisture formed from the water in entire chamber.
- **No Condensation**
Heating by front door heater & frame heater prevent condensation in chamber and on glass door.
- **Microprocessor PID Control**
Intelligence Control for CO₂ density, Temperature, Alarm, Automatic Decontamination(Optional).
- **Roller Apparatus in CO₂ incubator(NB-203QR)**
Standard - 4 Bottles (φ 100mm ~ 120mm) Customization-Contact N-BIOTEK sales team.
- **Built-in Shaker for mammalian cell culture with suspension**
Mini Shaker(NB-101S) is placed on bottom of chamber. 100 ~ 1000ml flasks available.
BLDC motor allows incubator no vibration, no particle occurrence, no noise which are ideal for dual cell culture(adherent and suspension) in one incubator at one time.
- **Controlling internal shaker and roller at outside**
Using cable, no need to open the door to set built-in apparatus.



Specification

Items	Unit	NB-203QR	NB-203QS
Temperature			
Range	°C	Ambient +5°C to 60°C	Ambient +5°C to 60°C
Accuracy	°C	±0.25°C at 37°C	±0.25°C at 37°C
Increment	°C	0.1°C	0.1°C
CO₂			
Range	%	0% to 20%	0% to 20%
Accuracy	%	±0.1% at 5%/37°C	±0.1% at 5%/37°C
Increment	%	0.1%	0.1%
Control		Microprocessor digital	Microprocessor digital
Built-in Apparatus		Roller apparatus	Shaker
Speed			
Range	rpm	0.2rpm to 5rpm	30rpm to 300rpm
Accuracy	rpm	±0.1rpm	±1rpm
Increment	rpm	0.1rpm	1rpm
Control		Microprocessor digital	Microprocessor digital
Time			
Range	hr	Continuous or up to 99h 59min	Continuous or up to 47h 59min
Memory(running)	hr	Remaining Time	
Door			
Outer		Silicon packing magnet door	Silicon packing magnet door
Inner		Tempered glass door	Tempered safety glass door
Display		LED Display	LED Display
Jacket Type		Dry wall type (6 sides heat)	Dry wall type (6 sides heat)
Chamber Material		Stainless steel(304)	Stainless steel(304)
Chamber Volume	liter	179 liters	179 liters
Number Of Shelves		2 layer Roller Rack+1 Shelve (2 Bottles for each layer)	1 Shaker+1 Shelve
Chamber Dimension	mm	473(W)x528(D)x710(H)mm	473(W)x528(D)x710(H)mm
Overall Dimension	mm	560(W)x665(D)x945(H)mm	560(W)x665(D)x945(H)mm
Power	V/Hz	110/220V, 50/60Hz, 600W	110/220V, 50/60Hz, 550W