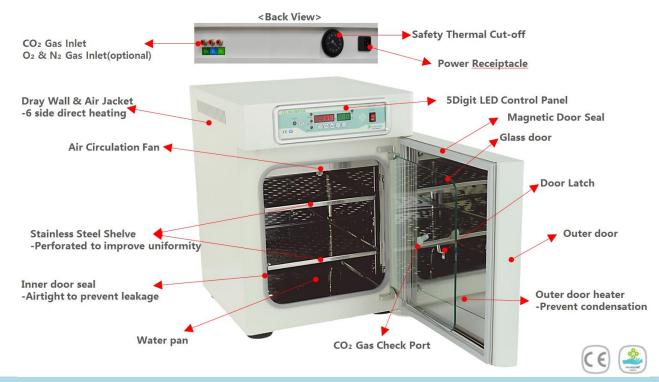


## 6 Side Direct Heat & Air Jacket Type CO<sub>2</sub> Incubators

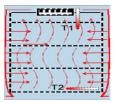




N-BIOTEK produces various CO<sub>2</sub> Incubators from small personal size to large capacity. Its 6 Side Direct heating and internal air circulation fan make uniform temperature distribution and it enables fast heat-up & fast temperature recovery. Precise Infrared CO<sub>2</sub> sensor detects CO<sub>2</sub> density accurately regardless of changing in temperature and humidity. A variety of options provides users of various choices to customize an incubator to fit their needs.



## ✤ FEATURES



Natural Air Convection with Assisted Air Circulation Fan Given nature of heat-flow, heating control is designed to give lower heat in upper part than bottom part and air fan mixes air for uniform temperature.



Stainless Steel Chamber Round corner for easy cleaning The chamber is made of quality stainless steel to minimize corrosion. Chamber edge is round for easy cleaning.



**Safety Thermal Cut-Off** Built-in Thermal cut off detects abnormal overheating and cut the heating not to rise in case of some errors in temperature control.



Natural Humidification Stainless steel water tray is placed at bottom of chamber. The water in tray is heated by bottom heater and humidify naturally inside.





All 6 sides of chamber are heated by heating wires. It allows fast heat-up and fast temp recovery. Such all sides heating also maximizes temperature uniformity.

#### Dual Beam IR CO2 sensor

It detect CO<sub>2</sub> precisely regardless of changing in temperature or humidity. Detection respond is also fast and it is helpful to control CO<sub>2</sub> accurately.





## Perforated Shelves

To make inside air circulated well for temperature uniformity, all inside shelves are perforated.

#### Multiple Indicators & Alarm System

Multiple pilot lamps show conditions of heater, gas injection, overheating. Built-in alarm system detects some errors in CO<sub>2</sub>, Temperature, door and warn it with audible alarm or signal.

# **Customize your incubator with various options!**



#### UV Sterilization

4W UV lamp can be installed above chamber ceiling and beside air circulation fan. The UV light is not reached to cells in vessels so it keeps lighting during culture.



CONTROL

#### Split Inner Glass Doors

It is helpful to make Low Gas Consumption, Low Heat Loss, Fast Recovery. Each glass doors is airtight with individual silicon sealing. 2 or 5 Divided Door for 42L Incubator 6 Divided Door for 179L Incubator

#### Oxygen Control

For Hypoxia or Hyperoxia condition, oxygen control option is necessary. The range of oxygen control is 1% to 95%. Precise Zirconia oxygen senor detect CO2 accurately and it is used.



#### ANTI-BACTERIAL AIR FITLER

It is equivalent to the HEPA filter but, it is used to filter the air inside chamber. It is located below air circulation fan. Filter installation is easy but, adding its holder is factory option.



ACCESS

PORT

#### 25mm Access Port with Silicon cap

Its standard position is at left side but, it can be placed at other position upon demand. To use some electric device inside chamber or to put some wires of monitoring sensors, the access port is useful.



COPPER

CHAMBER

#### Lower Temperature by Peltier

Adding Peltier enables little lower temperature setup in 42L, 179Liter CO2 Incubator. Maximum 18°C at 25°C room temperature is available. In this condition, humidity is low.

#### 100% Cooper Chamber

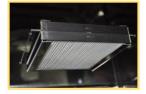
Customizing an incubator with cooper chamber is available in NB203, NB203XL.

Cooper maximizes anti-bacterial condition. Under this option, all shelves and covers(except water tray) inside are made of 100% cooper.



125℃ Hot Air Decontamination

Maximum 125°C Dry Hot Air Decontamination is available in NB203&NB203XL model. Total 8 hours automatic process includes both heating-up and cooling down phase. No need to remove any sensors for DECON.



**HEPA Filter** 



Access Port



2 Divided Inner Glass Door For 42L Incubator

179Liter CO<sub>2</sub> Incubator with 6 Split Inner Glass Door





Humidity Control Tray



**UV LAMP** 



**Copper Chamber** 



**Built-in Shaker** 

### Ordering information of Additional Factory Options

203-ING	5 or 2 DIVIDED DOOR FOR NB-203	203-STAKIT Stacking Kit for NB203		
203XL-ING	6 DIVIDED DOOR FOR NB-203XL			
203-HOLE	ACCESS PORT	203XL-STAKIT	AKIT Stacking Kit for NB203XL	
203-UV	UV Sterilization			
203-HEPA	HEPA Filter for NB203XL or NB203	203-113	03-113 Humidity Display(Not Control, Just display)	
203-02	Oxygen Control Option(1% ~ 95%)	203-HUM	Controllable humidity system in NB203, 203XL	
203-125	125'C Hot Air Sterilization for NB-203, NB203XL	203XXL-HUM	Controllable humidity system in NB203XXL	
203XL-125	125'C Hot Air Sterilization for 179 Liter Incubator,	203-114	Caster Base Tray for 179Liter Size Incubator	
203-SH	SHELVE for NB-203	203-COP	Copper Chamber for 203	
203XL-SH	SHELVE for NB-203XL		••	
203XXL-SH	SHELVE for NB-203XXL	203XL-COP	Copper Chamber for 203XL	
203XL-COOL	Peltier Cooling Option for 179Liter CO2 Incubator	203-COOL	Peltier Cooling for NB203, 42Liter CO <sub>2</sub> Incubator	







Specification				
Items	Unit	NB-203	NB-203XL	NB-203XXL
Temperature range accuracy increment control	ວ ວ ວ	Ambient +5°C to 60°C ±0.25°C at 37°C 0.1°C Microprocessor Digital PID	Ambient +5°C to 60°C ±0.25°C at 37°C 0.1°C Microprocessor Digital PID	Ambient +5°C to 60°C ±0.5°C at 37°C 0.1°C Microprocessor Digital PID
CO <sub>2</sub> range accuracy increment sensor control inlet pressure range	ĉ	0% to 20% ±0.1% at 5% at 37°C 0.1% IR CO2 Sensor Microprocessor 0.3~0.5bar	0% to 20% ±0.1% at 5% at 37°C 0.1% IR CO2 Sensor Microprocessor 0.6~0.7bar	0% to 20% ±0_1% at 5% at 37℃ 0_1% IR CO2 Sensor Microprocessor 0.9~1_0bar
Door out door inner door		Silicon Packing Magnet Door Tempered Glass Door	Silicon Packing Magnet Door Tempered Glass Door	Silicon Packing Magnet Door Tempered Glass Door
Operating panel		Individual 2 Channel Touch Button	Individual 2 Channel Touch Button	Individual 2 Channel Touch Button
Display Jacket type		LED Display Dry Wall Type (6 sides heat)	LED Display Dry Wall Type (6 sides Heat)	LED Display Dry Wall Type (6 sides Heat)
Chamber material Chamber volume liter		Stainless Steel (304) 42 liter 2ea (Max shelves 4ea)	Stainless Steel (304) 179 liter	Stainless Steel (304) 850 liter
Number of shelves Chamber dimension mm		320(W)x350(D)x370(H)mm	3ea (Max Shelves 8ea) 473(W)x528(D)x710(H)mm	3ea (Max Shelves 15ea) 698(W)x799(D)x1528(H)mm
-		408(W)x482(D)x550(H)mm 110/220V,50/60Hz,400W	560(W)x665(D)x945(H)mm 110/220V,50/60Hz,600W	820(W)x950(D)x1840(H)mm 110/220V,50/60Hz,1.2kW
Weight	kg	35kg	78kg	266kg

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