



7 Incubators / Ovens

Portable Mini CO₂ Incubator

Compact & Economical Mini CO₂ Incubator

Features

- > 15.2 Liter Chamber
- > 6.8 kg Light Weight to carry
- > Portable Use with carrying handle (Car Plug available)
- > Economical Price & Compact Design for Personal Use
- > Available size to use in work station or Clean bench
- > Digital Set-Up for Temperature & CO₂
- > Forced Air Circulation by Fan
- > Excellent Temperature Uniformity
- > Quick recovery & Precise CO₂ control by IR Sensor
- > Cooling with very low noise
- > Two Stainless Steel Shelves (Standard)
- > Natural Humidification by Water Pan
- > Cooling & Heating by peltier
- > Stainless steel Water Tray
- > Power Plug & Car Jack



Specifications

Product Name		WCI-15R
Chamber Volume		15.2 liter
Temperature	Range	15°C ~ 45°C (at Ambient 25°C)
	Accuracy	± 0.25°C
	Control	Micom
CO ₂	Range	0 ~ 20%
	Sensor	Dual Beam IR Sensor
	Accuracy	± 0.1% (5%)
	Gas Pressure	0.7Bar (Max.1Bar)
Humidity		Up to 80%
Display		LED Display
Cooling & Heating		By Peltier (thermoelectric elements)
Shelf		2, Stainless steel (standard) / Max (3ea)
In & Outside Material		ABS
Inside (W x Dx H mm)		224x 200 x 340
Outside (W x Dx H mm)		292x 333x 433
Weight		6.8Kg
Power / Frequency		220V , 50/60Hz
Power Consumption	DC-COLD: 46W, HOT: 48W	
	AC-COLD: 63W, HOT: 63W	
Order No.		189221



> Car Jack

Accessories & Options

Order No.	Name	Model
189231	Shelf (Stainless steel)	203M-SHELFUS (220x162mm-WxD)
189232	Measuring opening	203M-Hole

CO₂ Incubator

The incubator is ideal for the experiments of the cultivation of animal cells, sperm/ovum, anaerobic cells, all sorts of microbe cells, hatching/germinating and special tissues.



Features

Fast Heat-Up, Fast-Recovery, Stable Control

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.

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 of 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).

HEPA filtration of chamber

Options

Customize your incubator with these options



Access port

25mm Access Port is available at left side. (Upon ordering and additional charge)



UV sterilization

4W UV is placed up of chamber ceiling and beside of circulation fan. The UV light is not reached to sample and sterilization is operated during culturing.



Maximum 125°C Dry Hot Air in

WCI-40N, WCI-180N
No need to remove IR CO₂ sensor



Monitoring System

Analog connection port has been designed to observe the status of equipments in real time even in the far distance.



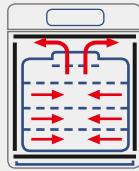
lower Gas Consumption. lower Heat loss.

Faster Recovery Easy Classification for Various samples.

5 Split Door for WCI-40N
6 Split Door for WCI-180N

Natural Air and Moisture Convection

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



Easy to clean

Rounded Conner allows easy cleaning. Entire chamber is made of stainless steel(SUS316)



Alarm System

Buzzer to alarm low or high deviation of CO₂, Temperature.



Over Heating Limit

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



Perforated Shelves

Perforated Shelves are good for natural air flows and are made of stainless steel which are resistant against rust and contamination.



Specifications

Model	WCI-40	WCI-180	WCI-260	WCI-650	WCI-850	
Chamber volume	40L	180L	260L	650L	850L	
Temp. °C	Range	Ambient+5~60	Ambient+5~60	Ambient+5~60	Ambient+5~60	Ambient+5~60
	Accuracy	± 0.1°C (37°C)	± 0.1°C (37°C)	± 0.1°C (37°C)	± 0.1°C (37°C)	± 0.1°C (37°C)
	Resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
	Control	Digital PID	Digital PID	Digital PID	Digital PID	Digital PID
	Uniformity	± 0.3°C (37°C / RT.20°C)	± 0.3°C (37°C / RT.20°C)	± 0.4°C (37°C / RT.20°C)	± 0.5°C (37°C / RT.20°C)	± 0.5°C (37°C / RT.20°C)
	Heating Capacity	320W	320W	610W	1100W	1400W
CO ₂	Range	0% ~ 20%	0% ~ 20%	0% ~ 20%	0-20%	0-20%
	Accuracy	± 0.1% (5% / 37°C)	± 0.1% (5% / 37°C)	± 0.1% (5% / 37°C)	± 0.3% (5% / 37°C)	± 0.3% (5% / 37°C)
	Resolution	0.1%	0.1%	0.1%	0.1%	0.1%
	Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor
	Control	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Inlet pressure range	0.3~0.5bar	0.3~0.5bar	0.6~0.7bar	0.7~1.0bar	0.7~1.0bar
Display	LED Display	LED Display	LLED Display	LED Display	LED Display	
Operating panel	Individual 2 Channel Touch Button	Individual 2 Channel Touch Button	Individual 2 Channel Touch Button	Individual 2 Channel Touch Button	Individual 2 Channel Touch Button	
Jacket type	Dry Wall Type (6 sides heat)	Dry Wall Type (6 sides heat)	Dry Wall Type (6 sides heat)	Dry Wall Type (6 sides heat)	Dry Wall Type (6 sides heat)	
Chamber material	Stainless Steel (304)	Stainless Steel (304)	Stainless Steel (304)	Stainless Steel (304)	Stainless Steel (304)	
Number of shelves	2/4	3/8	3/8	3/15	3/15	
Chamber dimension (WxDxH)	320x350x375mm	473x528x710mm	530x590x900mm	700x650x1430mm	700x800x1530mm	
Overall dimension (WxDxH)	420x460x570mm	560x620x945mm	630x680x1125mm	820x780x1740mm	820x930x1840mm	
Weight (kg)	38	80	115	230	260	
Order No.	Standard	W6011040	W6011180	W6011260	W6011650	W6011850
	Sterilization	W6012040	W6012180	W6012260	W6012650*	W6012850*

Copper Chamber CO₂ Incubator

Copper oxide / copper-plated inner chamber, sterilization effect is better!

Model	WNB-180Cu	
Capacity	180L	
Temperature °C	Range	Rt+5~60°C
	Display accuracy	± 0.1°C (37°C)
	Resolution	0.1°C
	Control	Digital PID
	Temperature uniformity	± 0.3°C (37°C / Rt20°C)
CO ₂	Heating power	320W
	Range	0% ~ 20%
	Accuracy	± 0.1% (5% / 37°C)
	Resolution	0.1%
	Sensor	Dual infrared CO ₂ sensor
	Control	Microprocessor
Display	Inlet pressure	0.3~0.5bar
	LED	
Panel	Individual dual channel panel	
Jacket style	Air (six sides heating)	
Interior material	Copper oxide/ copper plating	
Shelves (standard/ max)	3/8	
Copper oxide interior	Standard	
Order No.	Standard	W6028180
	Sterilization	W6028181



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Accessories about the CO₂ Incubators

Order No.	Name	Description	Suitable for
W6010401	Stainless steel shelf	④ Perforated to improve uniformity	WCI-40
W6011801	Stainless steel shelf	④ Perforated to improve uniformity	WCI-180, WNB-180R/S/Cu
W6012601	Stainless steel shelf	④ Perforated to improve uniformity	WCI-260
W6016501	Stainless steel shelf	④ Perforated to improve uniformity	WCI-650
W6018501	Stainless steel shelf	④ Perforated to improve uniformity	WCI-850
W6010402	Roller Base	⑤ Height 20cm from Bottom	WCI-40
W6011802	Roller Base	⑤ Height 20cm from Bottom	WCI-180, WNB-180R/S/Cu
W6011803	Stacking Kit	Stacking Kit	WCI-180
W6012603	Stacking Kit	Stacking Kit	WCI-260
W6011804	HEPA	HEPA filtration of gas circulation	All CO ₂ incubator
W6012604	HEPA	HEPA filtration of gas circulation, sterilizable	WCI-260, WCI-650, WCI-850
W6010405	Water pan	Heated by 6 sides direct heating for humidity	WCI-40
W6011805	Water pan	Heated by 6 sides direct heating for humidity	WCI-180, WNB-180R/S/Cu
W6012605	Water pan	Heated by 6 sides direct heating for humidity	WCI-260
W6016505	Water pan	Heated by 6 sides direct heating for humidity	WCI-650
W6018505	Water pan	Heated by 6 sides direct heating for humidity	WCI-850
W6011806	UV sterilization unit	4W UV lamp. Install the side of the top fan	All CO ₂ incubator
W6011807	Peltier cooling	5°C Below from Ambient, Lowest Temperature: 20°C	Standard, WCI-40, WCI-180
W6011808	Peltier cooling	5°C Below from Ambient, Lowest Temperature: 20°C	Sterilization, WCI-40, WCI-180
W6011809	Monitoring system	Analog connection port has been designed to observe the status of equipments in real time even in the far distance.	All CO ₂ incubator
W6011810	GAS regulator	② GAS regulator	WCI-40, WCI-180, WNB-180R/S/Cu
W6011811	CO ₂ Analyzer	③ CO ₂ Analyzer	WCI-40, WCI-180, WNB-180R/S/Cu
W6011812	Divided Door	① 5 Divided Door	WCI-40
W6011813	Divided Door	① 3 Divided Door	WCI-180, WNB-180Cu
W6011814	Divided Door	① 6 Divided Door	WCI-180, WNB-180Cu
W6011815	Printer	Printer	All CO ₂ incubator
W6011816	Holes for auxiliary monitoring	Diameter of 25mm, on the left side of the incubator	All CO ₂ incubator

Constant Temperature Incubators

Versatile air-jacketed natural convection incubators.

Specially designed for uniform temperature distribution and minimal sample contamination caused by external air intrusion.



Features

- > Applicable in life-science, pharmacy, medical science, chemistry, biology, and related fields for storage of samples which need constant temperature and incubation
- > Digital temperature display and control
- > PID controller for temperature stability and safety protection
- > Very good heating characteristics
- > Ecologically friendly
- > Easy to clean
- > Timer function
- > Can be opened anytime when necessary
- > Temperature measure unit is °C
- > When the temperature exceeds set levels and reaches the set safety value, an alarm activates, and the incubation process stops
- > The material of the observation window is tempered glass, which has good safety and sealing characteristics
- > The magnetic door and high-quality gasket can absorb external shocks and comprise excellent sealing characteristics
- > Easy to clean stainless steel shelves with good air permeability and adjustable height
- > In case of temperature deviations, the BIAS function sets in, which makes operation convenient
- > For the case of an unexpected power breakdown the incubator offers two working options: Automatic re-operation and automatic stop
- > Upon opening the incubator, and the fan and heating device stop operation
- > Alarm sound for sample protection sets in when the door is open for more than 60 seconds

Specifications

Product Name	WH-05	WH-10	WH-15	WH-25	WH-650	WH-850	WH-1200
Volume (L)	50 L	100 L	150 L	260 L	650 L	850 L	1200 L
Temperature Range (°C)	Ambient Temperature + 5~65						
Accuracy (°C)	< ± 0.2 (37°C)						
Temperature Stability (°C)	± 0.1(37°C)						
Temperature Controller	Button Control; Digital Display with PID automatic regulation						
Materials	Interior: Stainless steel ; Shelves: Polished stainless steel ; Inner glass door: 5 mm high temperature resistant safety glass Casing: Steel plate, Spray coating ;						
Timer	1 min ~ 99 hr 59 min						
Heating Capacity	340W	340W	340W	610W	1100W	1400W	1600W
Mains Requirements	AC 220~240 V, 50/60 Hz						
Shelves (included / max.)	2/3	2/4	2/8	3/8	3/15	3/15	5/35
Inner Dimensions (WxDxH in mm)	345 x 368 x 375	480 x 480 x 495	500 x 480 x 620	530 x 590 x 900	700 x 650 x 1430	700 x 800 x 1530	868 x 720 x 1927
Outer Dimensions (WxDxH in mm)	440 x 480 x 610	560 x 560 x 760	560 x 580 x 880	630 x 680 x 1125	820 x 780 x 1740	820 x 930 x 1840	990 x 855 x 2124
Weight (kg)	35	50	65	115	230	260	300
Order No.	W6031050	W6031100	W6031150	W6031250	W6031650	W6031850	W6031122

Low Temperature Incubators

Superb low temperature incubation performance using a noiseless HBP compressor cooling system which reduces water evaporation within the chambers.



Features

- > Applicable in life-science, pharmacy, medical science, chemistry, biology, and related fields for storage of samples which need a constant temperature and for incubation.
- > Digital temperature display and control
- > PID controller for temperature stability and safety protection
- > Stainless steel shelves
- > Very good heating characteristics
- > Ecologically friendly
- > Easy to clean
- > Timer function
- > Heating function start and duration can be pre-set
- > Temperature control programs: Temperature programs can be divided into 9 sections and for every section temperature and duration can be set individually
- > 3 pre-set often used temperatures
- > Can be opened anytime when necessary
- > Temperature measure unit can be set as either °C or °F
- > When the temperature exceeds set levels and reaches the set safety value, an alarm activates, power is cut off, and the incubation process stops
- > An observation window made of tempered glass is installed, which makes the examination of samples easy and convenient, and which does not lead to unnecessary disruptions of the incubation process
- > The high-quality gasket can absorb external shocks and comprise excellent sealing characteristics
- > The stainless steel shelves have a good air permeability, are easy to clean and can be adjusted in height
- > When temperature deviation occurs, the BIAS function sets in, which makes operation convenient
- > For the case of an unexpected power breakdown the incubator offers two working options: Automatic re-operation and automatic stop
- > When opening the incubator, and the fan and heating device stop operation. After one minute without closing the door an alarm sets in
- > The WH-11C and the WH-21C incubators use heat transfer method for circulation. In a separated room outside the work space it uses heat exchange, in the working space it uses natural convection and forced circulation
- > The circulation method will not induce air pollution and can guarantee exact temperature distribution

Specifications

Product Name	WH-11C	WH-21C
Temperature Control Method	Forced circulation method (fans integrated in the work environment)	
Volume(L)	150	250
Temperature Range(°C)	+4 ~ 60	+4 ~ 60
Accuracy(°C)	< ±0.1°C	< ±0.1°C
Temperature Uniformity(°C)	±1.5 (37°C)	±1.5 (37°C)
Temperature Controller	Touch Control; Digital Display with PID automatic regulation	
Materials	Interior: Stainless steel ; Shelves: Polished stainless steel ; Observation window: glass	
Timer	1 min ~ 99 hr 59 min	
Heating Capacity(W)	450	450
Max. Cooling Capacity(W)	350	350
Mains Requirements	AC 220 ~ 240V, 50/60 Hz	AC 220 ~ 240V, 50/60 Hz
Shelves (included / max.)	2/5	3/7
Inner Dimensions (W × D × H in mm)	550 x 500 x 610	550 x 500 x 1000
Outer Dimensions (W × D × H in mm)	660 x 605 x 1020	660 x 605 x 1415
Weight (kg)	95	120
Order No.	W6055150	W6055250

Forced Convection Ovens

General Models

Ideal for high temperature storage with user-friendly design. WF-G Models is used for all sterilization and drying tasks that do not require high drying rates or special time requirements, ideal for drying applications requiring a gentle airflow.

Operating Features

- > From +10°C above room temperature to 260°C .
- > Microprocess PID control / Calibration.
- > Digital timer: 1 min ~ 99 hr 59 min, delayed ON / OFF.
- > Over temperature limit protection / Door opening alarm.
- > Conveniently preset 3 most commonly used temperature settings.
- > Digital LED display (0.1°C resolution) with touch keypads

Constructional Features

- > Gravity-flow convection with vertical airflow for uniform sample heating.
- > Threefold tempered glass viewing window allows for easy monitoring of samples.
- > Featuring a pull down door handle.
- > Rounded inner chamber corners for easy cleaning and better air-flowing.
- > Stainless steel interior.
- > Two circular adjustable top slide vents helps to control inner air vapor circulation. (38mm / 1.5" in dia.)



Specifications

Model	WF-02G	WF-12G	WF-22G
Chamber Volume (L)	50	100	150
Temperature	Range (°C)	Amb.+10~ 260	Amb.+10~ 260
	Fluctuation at 100°C (°C)	0.5	0.6
Dimension (W × D × H)	Interior (mm)	400 × 420 × 420	480 × 460 × 500
	Exterior (mm)	540 × 620 × 780	600 × 690 × 810
Number of shelves	2ea (Max shelves 8ea)	2ea (Max shelves 12ea)	2ea (Max shelves 14ea)
Weight (kg)	55	62	72.5
Heating power (W)	1000	1500	2000
Order No.	W6061050	W6061100	W6061150

Accessories & Options

Perforated Shelves

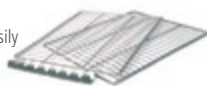
Stainless steel shelf system is removed easily without using tools for easy cleaning.



Order No.	Description W x L (mm)	Model
12531	360 × 310	WF-02G
12532	450 × 380	WF-12G
13533	465 × 400	WF-22G

Wire Shelves

Stainless steel and electropolished shelf system is removed easily without using tools for easy cleaning.



Order No.	Description W x L (mm)	Model
EDA8136	360 × 310	WF-02G
EDA8135	450 × 380	WF-12G
EDA8134	465 × 400	WF-22G

Tempered Viewing Windows

Optimized sample monitoring with threefold, temperi



Order No.	Thickness / xW x L (mm)	Suitable for
12611	5 / 150 × 280	WF-02G
12612	5 / 150 × 380	WF-12G, WF-22G

Fan-speed adjuster, analog control

Order No.	Description	Suitable for
12001	Fan-speed adjuster, analog control	WF-02G, 12G, 22G

