

# 7 Incubators / Ovens







# Portable Mini CO<sub>2</sub> Incubator

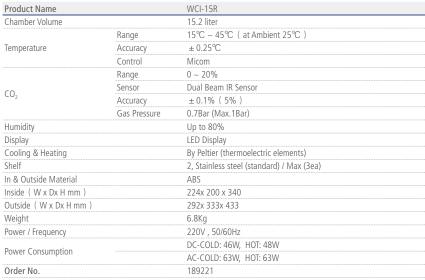
Compact & Economical Mini CO<sub>2</sub> Incubator

## 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 & CO<sub>2</sub>
- > Forced Air Circulation by Fan
- > Excellent Temperature Uniformity
- $>\,$  Quick recovery & Precise  ${\rm CO_2}$  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



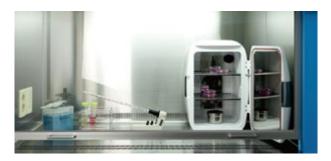














> Car Jack

# Accessories & Options

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



## 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 CO<sub>2</sub> Sensor

Fast & Precise Detection for CO<sub>2</sub> 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  $CO_2$  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-40N

# Alarm System

Buzzer to alarm low or high deviation of  ${\rm CO_{2}}$ , Temperature.



# 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.



# Over Heating Limit

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



# Easy to clean

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



# 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
	Range	Ambient+5~60	Ambient+5~60	Ambient+5~60	Ambient+5~60	Ambient+5~60
	Accuracy	±0.1℃ (37℃)	±0.1℃ (37℃)	±0.1℃ (37℃)	±0.1℃ (37℃)	±0.1℃ (37℃)
Temp.	Resolution	0.1℃	0.1℃	0.1℃	0.1℃	0.1℃
$^{\circ}$ C	Control	Digital PID				
	Uniformity	± 0.3°C (37°C / RT.20°C )	± 0.3°C (37°C / RT.20°C )	± 0.4℃ (37℃ / RT.20℃ )	± 0.5℃ (37℃ / RT.20℃ )	± 0.5°C (37°C / RT.20°C )
	Heating Capacity	320W	320W	610W	1100W	1400W
	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)
60	Resolution	0.1%	0.1%	0.1%	0.1%	0.1%
CO <sub>2</sub>	Sensor	IR CO₂ Sensor	IR CO₂ Sensor	IR CO <sub>2</sub> Sensor	IR CO₂ Sensor	IR CO₂ 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				
Jacket type	2	Dry Wall Type (6 sides heat) )				
Chamber r	material	Stainless Steel (304)				
Number of	f shelves	2/4	3/8	3/8	3/15	3/15
Chamber o	dimension ( WxDxH )	320x350x375mm	473x528x710mm	530x590x900mm	700x650x1430mm	700x800x1530mm
Overall din	nension ( WxDxH )	420x460x570mm	560x620x945mm	630x680x1125mm	820x780x1740mm	820x930x1840mm
Weight ( k	kg )	38	80	115	230	260
Order No.	Standard	W6011040	W6011180	W6011260	W6011650	W6011850
Order NO.	Sterilization	W6012040	W6012180	W6012260	W6012650*	W6012850*

# Copper Chamber CO<sub>2</sub> Incubator

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

Model		WNB-180Cu
Capacity		180L
	Range	Rt+5~60°C
	Display accuracy	±0.1℃ (37℃)
Temperature	Resolution	0.1℃
°C	Control	Digital PID
	Temperature uniformity	± 0.3°C (37°C / Rt20°C )
	Heating power	320W
	Range	0% ~ 20%
	Accuracy	± 0.1% (5% / 37℃ )
CO <sub>2</sub>	Resolution	0.1%
CO2	Sensor	Dual infrared CO₂ sensor
	Control	Microprocessor
	Inlet pressure	0.3~0.5bar
Display		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
Order No.	Sterilization	W6028181













# Accessories about the CO<sub>2</sub> Incubators

Order No.	Name	Description	Suitable for
W6010401	Stainless steel shelve	④ Perforated to improve uniformity	WCI-40
W6011801	Stainless steel shelve	④ Perforated to improve uniformity	WCI-180, WNB-180R/S/Cu
W6012601	Stainless steel shelve	④ Perforated to improve uniformity	WCI-260
W6016501	Stainless steel shelve	④ Perforated to improve uniformity	WCI-650
W6018501	Stainless steel shelve	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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> incubator
W6011810	GAS regulator	② GAS regulator	WCI-40, WCI-180, WNB-180R/S/Cu
W6011811	CO <sub>2</sub> Analyzer	③ CO₂ 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 <sub>2</sub> incubator
W6011816	Holes for auxiliary monitoring	Diameter of 25mm, on the left side of the incubator	All CO <sub>2</sub> 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  $^{\circ}\mathrm{C}$
- > 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
- > 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 (°⊂)			Aml	oient Temperature + 5	5~65		
Accuracy ( °C )				<±0.2 (37°C)			
Temperature Stability ( $^{\circ}$ C )				±0.1(37°C)			
Temperature Controller			Button Control; Dig	jital 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 ;			fety glass			
Timer				1 min ~ 99 hr 59 mir	1		
Heating Capacity	340W	340W	340W	610W	1100W	1400W	1600W
Mains Requirements			A	C 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  $^{\circ}\!C$  or  $^{^{0}}\!F$
- > 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 compriseexcellent 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(°⊂ )	+4 ~ 60	+4 ~ 60	
Accuracy(°⊂ )	<±0.1°C	<±0.1℃	
Temperature Uniformaty( $^{\circ}$ C )	±1.5 (37°C)	±1.5 (37℃)	
Temperature Controller	Touch Cont	rol; 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 $\times$ D $\times$ 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**

- $> \mbox{ From } + 10\mbox{\,}^{\circ}\mbox{C}$  above room temperature to  $260\mbox{\,}^{\circ}\mbox{C}$  .
- > Microprocess PID control / Calibration.
- > Digital timer: 1 min  $\sim$  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
T	Range ( °C )	Amb.+10~ 260	Amb.+10~ 260	Amb.+10~ 260
remperature	Fluctuation at 100°C (°C)	0.5	0.6	0.8
Dimension	Interior ( mm )	$400\times420\times420$	$480\times460\times500$	$500 \times 480 \times 625$
$(W \times D \times H)$	Exterior ( mm )	540 × 620 × 780	$600\times690\times810$	$660 \times 750 \times 920$
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.

4	MAN AND AND AND AND AND AND AND AND AND A

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

## Tempered Viewing Windows

Optimized sample monitoring with threefold, tempere



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

#### Wire Shelves

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

Order No.	DescriptionW x L ( mm )	Model
EDA8136	360 × 310	WF-02G
EDA8135	450 × 380	WF-12G
FDA8134	465 × 400	WF-22G

# Fan-speed adjuster, analog control



# 

www.dia-m.ru

С.-Петербург +7 (812) 372-6040 spb@dia-m.ru

Казань +7(843) 210-2080 kazan@dia-m.ru

Новосибирск +7(383) 328-0048 nsk@dia-m.ru

Ростов-на-Дону +7 (863) 303-5500 rnd@dia-m.ru

Воронеж +7 (473) 232-4412 vrn@dia-m.ru

Екатеринбург +7 (912) 658-7606 ekb@dia-m.ru

Йошкар-Ола +7 (927) 880-3676 nba@dia-m.ru

Кемерово +7 (923) 158-6753 kemerovo@dia-m.ruu

Красноярск +7(923) 303-0152 krsk@dia-m.ru

Армения +7 (094) 01-0173 armenia@dia-m.ru

