

More choice, stability and protection. Same great VWR quality and value.

VWR® symphony™

**Water-Jacketed** 

and Air-Jacketed

**CO<sub>2</sub> Incubators** 

Pictured: L-R, symphony 1.4 A (98000-356), symphony 5.3 A (98000-362), symphony 6.5W (98000-358) and symphony 8.5A (98000-370)



NEW models, larger capacities, and contamination control

# A new choice of state-of-the-art CO<sub>2</sub> incubators for your cell and tissue culture applications

#### The Choice is Yours

The new VWR symphony series provides unsurpassed performance, reliability and selection. An enhanced and expanded line of incubators incorporating advanced technology for the safe and stable growth of your cell cultures, symphony CO<sub>2</sub> incubators offer a range of solutions to meet your specific culturing preferences. Symphony CO<sub>2</sub> incubators will harmonize with all your needs and work environment.

Symphony CO<sub>2</sub> incubators are available in a range of convenient sizes to match your capacity requirements. Choose from water- or airjacketed temperature control technology, thermal conductivity (TC) or infrared (IR) sensor based CO<sub>2</sub> regulation and even single or dual stacked model configurations.

### The symphony Series Has It All!

- Water- or air-jacketed temperature control
- Unit capacities of 1.4, 5.3,6.5 and 8.5 cu. ft.
- High temperature decontamination models available
- TC or IR CO<sub>2</sub> sensors
- Convenient dual stack packages or single units

### **Temperature Control** Water- or Air-Jacketed?

Whether you prefer the renown thermal stability of water-jacketed designs or lightweight and low maintenance convenience with the additional protection of high temperature contamination control, provided by airjacketed technology, you'll find what you are looking for in the symphony series.

## **CO<sub>2</sub> Control**Thermal Conductivity or Infrared?

VWR symphony CO<sub>2</sub> incubators are available with thermal conductivity (TC) or infrared (IR) sensors to suit your preference for automatic CO<sub>2</sub> control.

TC sensors provide accurate CO<sub>2</sub> control in applications where temperature and humidity values are consistent. IR sensors are recommended in uses where temperature and humidity are changed frequently.

Rounded corners within the symphony's non-corrosive stainless steel chambers, simplify cleaning, reducing the risk of contaminatioin.



Symphony features large shelves for ample sample storage. Shelves and associated supports are easily removed for cleaning.





Symphony incubators are designed to be easy to install and operate, and provide reliable performance for all your culturing needs.

# 6.5W

# VWR symphony 6.5W Water-Jacketed CO<sub>2</sub> Incubator – superior temperature stability and security

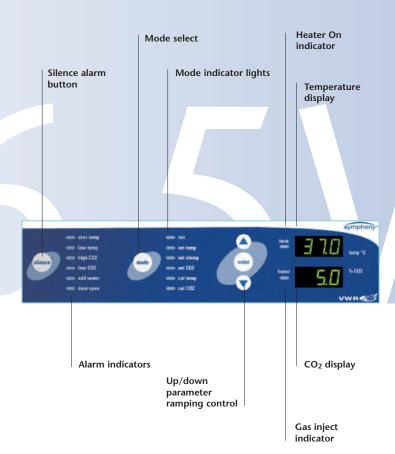
The symphony 6.5W protects your cultures by surrounding them with an insulated triple wall cabinet construction and a jacket of temperature conditioned water, providing unsurpassed protection against unwanted heat loss, even in the event of a power outage!

Featuring a large 6.5 cubic foot capacity corrosion resistant stainless steel chamber, the symphony 6.5W is the ideal choice for laboratories concerned with subjecting their cultures to potential disruption of power or significant ambient temperature fluctuations.

#### **Key Features**

- Large internal volume of 6.5 cu. ft.
- Choice of TC or IR sensor based CO<sub>2</sub> control
- Internal shelves and supports are easily installed and removed without tools
- Remote alarm contacts for connection to in-house alarm system
- Available dual stack package includes mobile support stand, maximizing lab space
- In-chamber HEPA filtration system available on the premium model





#### Simple to Navigate User Interface Panel

Full control of the symphony 6.5W is at your fingertips, in the clearly marked, easy-to-use interface panel. Featuring separate large LED displays for temperature and CO<sub>2</sub> parameters, and convenient touch sensitive membrane controls, providing status of incubator functions and parameters.

### NEW

### Protect your water-jacketed incubator with in-chamber HEPA air filtration system

In chamber HEPA air filtration system continuously filters the entire chamber air volume every 60 seconds, creating cleanroom Class 100 conditions to preserve your aseptic culturing environment. With airborne contaminants from routine door openings the primary source of contamination in most cell culture laboratory settings, the full time protection of the HEPA airflow system safeguards your cultures and minimizes downtime.

# 5.3A

# VWR symphony 5.3 A and 8.5 A Air-Jacketed CO<sub>2</sub> Incubators – reliable performance with enhanced contamination control

Symphony 5.3A and 8.5A CO<sub>2</sub> incubators employ advanced airjacketed temperature control technology to assure an optimal, stable growing environment for cell and tissue cultures. Low maintenance and lighter than traditional water-jacketed models, the 5.3 and 8.5A units feature a new, unique pan-less humidity water reservoir which improves recovery characteristics and cell growth.

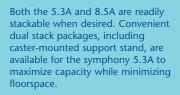
Each unit is available with an integral 90°C moist heat high temperature decontamination cycle, proven effective in eliminating most common contaminants.

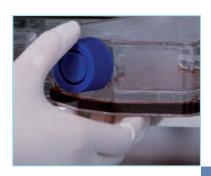


- Large internal volumes of 5.3 and 8.5 cu. ft.
- NEW 90°C decontamination function available for total contamination control, without removing sensors
- Choice of TC or IR CO2 control
- Internal shelves and supports are easily installed and removed without tools
- Dual stack configurations on caster-mounted stands double useful capacity and save valuable lab space



With chamber capacities of 5.3 and 8.5 cubic feet respectively, the symphony 5.3A and 8.5A are the ideal choice for busy laboratories where contamination concerns are prevalent and ease of cleaning of importance.







### NEW 90°C Decontamination Function – protect your valuable cultures!

VWR symphony 5.3A and 8.5A CO<sub>2</sub> incubators are available with an on-demand, automatic 90°C decontamination function that decontaminates the entire chamber interior without the need to remove sensors, fittings and shelves. Independant laboratory tests have validated that 90°C moist heat decontamination is highly effective against a wide range of contaminants, including mycoplasma.

# 8.5A



#### Air-Jacketed – fast, reliable and convenient VWR symphony 5.3 A

and 8.5 A air-jacketed CO<sub>2</sub> incubators feature a fully-automated start-up routine that gets you up and working within a few hours. They are easy-to-use due to their intuitive and simplified interface control panels.

## Unique Humidity System – faster recovery times, safer cultures

Our VWR symphony 5.3 A and 8.5 A CO<sub>2</sub> incubators use a unique pan-less humidity system which generates high relative humidity protecting cultures from drying out. Humidity recovery times are up to five times faster than those of standard water tray.

### Control Panel – simple to navigate user interface panel

Full control of the symphony 5.3 A and 8.5 A is at your fingertips. The decontamination cycle is conveniently started with the touch of a button. The easy-to-use interface panel features separate large LED displays for temperature and

CO<sub>2</sub> parameters, and convenient touch sensitive membrane controls, providing status of incubator functions and parameters.

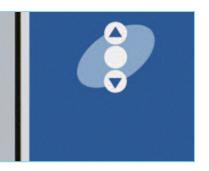
# 1.4A

# VWR symphony 1.4 A Air-Jacketed CO<sub>2</sub> Incubator – for personal or small sample applications

Small yet fully featured, the symphony 1.4 A offers all the benefits of air-jacketed technology in a space saving benchtop cabinet with 1.4 cubic feet of culturing capacity. With a footprint of just 23.5" wide x 18.5" deep, the compact symphony 1.4 A is ideal for use as a personal incubator or for low volume applications in space constrained working environments.

#### **Key Features**

- Internal volume of 1.4 cu. ft.
- Easy to clean, seamless interior chamber with coved corners and minimized internal surfaces
- Supplied with 4 stainless steel shelves
- Radiant wall heating for accurate, uniform temperatures and optimal recovery
- Comprehensive alarm system with audible and visual alerts







98000-356

A simple three-button touchpad allows quick access to all functions. High-visibility digital read-outs simplify operation and monitoring. The symphony 1.4A air-jacketed  $CO_2$  incubator features microprocessor-based, automatic thermal conductivity  $CO_2$  control and autozero calibration.



## 1.4A

### VWR symphony 1.4A Air-Jacketed CO<sub>2</sub> Incubator

Technical Specifications	
Temperature	
Control	±0.1°C
Range	5°C above ambient to 60°C (150°F)
Uniformity	±0.4°C @ 37°C (98.6°F)
Tracking Alarm	User-programmable high/low
CO <sub>2</sub>	
CO <sub>2</sub> Control	Better than ±0.1%
CO <sub>2</sub> Range	0-20%
Inlet Pressure Required	15 PSIG (1.0 bar)
CO <sub>2</sub> Sensor	TC
Readability & Setability	0.1%
Tracking Alarm	User-programmable high/low
Humidity	
rH	Ambient to 95% @ 37°C (98.6°F)
Humidity Pan	1.5 gal. (5.7 L), standard
Fittings	
Access Port with Filter	1.3" (3.3 cm) with removable silicone plug
CO <sub>2</sub> Inlet	1/4" hose (barbed)
Unit Heat Load	
120V	200 BTU/Hr

Shelves	
Dimensions (W x D)	13.5 x 11.5" (34.3 x 29.2 cm)
Construction	Stainless steel, perforated
Surface Area	1.08 sq. ft. (0.1 sq. m)
Max. per Chamber	4.32 sq. ft. (0.40 sq. m)
Standard	4
Construction	
Interior Volume	1.4 cu. ft. (39.6 L)
Interior	Type 304, mirror finish, stainless steel
Exterior	18 gauge, cold-rolled steel
Electrical	
Rated Voltage	120V, 60Hz (Operating range 90-125V)
Circuit Breaker/Power Switch	15 Amp
Plug	NEMA 5-15
Alarm Contacts	Power interruption; deviation of temp, CO <sub>2</sub>
Dimensions	
Exterior (W x H x D)	18.5 x 18 x 23.5" (47 x 46.5 x 59.7 cm)
Interior (W x H x D)	12 x 14 x 14" (30.5 x 46.5 x 35.5 cm)
Weight	
Net	60 lbs. (28 kg)
Shipping	70 lbs (33 kg)

Ordering Information		
Model	Description	Cat. No.
VWR symphony 1.4A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor	98000-356

# 6.5W

### VWR symphony 6.5W Water-Jacketed CO<sub>2</sub> Incubator

Technical Specifications	
Temperature	
Control	±0.1°C
Range	5°C above ambient to 55°C (131°F)
Uniformity	±0.2°C @ 37°C (98.6°F)
Tracking Alarm	User-programmable high/low
Temperature Safety	
Sensor	Precision thermistor
Controller	Independent analog electronic
Setability	0.1%
CO <sub>2</sub>	
CO <sub>2</sub> Control	Better than ±0.1%
CO <sub>2</sub> Range	0-20%
Inlet Pressure Required	15 PSIG (1.0 bar)
CO <sub>2</sub> Sensor	TC or IR
Readability & Setability	0.1%
Tracking Alarm	User-programmable high/low
Humidity	
rH	Ambient to 95% @ 37°C (98.6°F)
Humidity Pan	0.8 gal. (3 L), standard
Fittings	
Fill Port	3/8" hose (barbed)
Drain Port	1/4" hose (barbed)
Access Port with Filter	1.3" (3.3 cm) with removable silicone plug
CO <sub>2</sub> Inlet	1/4" hose (barbed)
Unit Heat Load	
120V	344 BTU/Hr

Shelves	
Dimensions (W x D)	18.5 x 18.5" (47 x 47 cm)
Construction	Stainless steel, perforated
Surface Area	2.4 sq. ft. (0.2 sq. m)
Max. per Chamber	40.8 sq. ft. (3.8 sq. m)
Standard, Maximum	4, 17
Water Jacket Volume	11.7 gal. (43.5 L)
Construction	
Interior Volume	6.5 cu. ft. (184.1 L)
Interior	Type 304, mirror finish, stainless steel
Exterior	18 gauge, cold-rolled steel, powder coated
Electrical	
Rated Voltage	115V, 50/60Hz, 3.6 FLA
	(Operating range 90-125V)
Circuit Breaker/Power Switch	6 Amps/2 Pole
Plug	NEMA 5-15
Alarm Contacts	Power interruption; deviation of temp, CO <sub>2</sub>
Dimensions	
Exterior (W x H x D)	26 x 39.5 x 25" (66.8 x 100.3 x 63.5 cm)
Interior (W x H x D)	21.3 x 26.8 x 20" (54.1 x 68.1 x 50.8 cm)
Weight	
Net	265 lbs. (120.2 kg)
Net Operational	365 lbs. (166.0 kg)
Shipping (Motor)	324 lbs. (147.0 kg)
Interior Volume Interior Exterior Electrical Rated Voltage  Circuit Breaker/Power Switch Plug Alarm Contacts Dimensions Exterior (W x H x D) Interior (W x H x D) Weight Net Net Operational	Type 304, mirror finish, stainless steel  18 gauge, cold-rolled steel, powder coated  115V, 50/60Hz, 3.6 FLA  (Operating range 90-125V)  6 Amps/2 Pole  NEMA 5-15  Power interruption; deviation of temp, CO2  26 x 39.5 x 25" (66.8 x 100.3 x 63.5 cm)  21.3 x 26.8 x 20" (54.1 x 68.1 x 50.8 cm)  265 lbs. (120.2 kg)  365 lbs. (166.0 kg)

Model	Description	Cat. No.
Single-Unit Incubators		
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor	98000-358
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor and HEPA Filter	97025-836
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor	98000-360
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor and HEPA Filter	97025-838
Dual-Stacked Incubators		
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor and Mobile Support Stand	98000-000
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor, HEPA Filter, and Mobile Support Stand	97025-840
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor and Mobile Support Stand	98000-002
VWR symphony 6.5W Water-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor, HEPA Filter, and Mobile Support Stand	97025-842
Accessories		
HEPA and Inline Filter Kit	Replacement for 6.5W Incubators	97025-844
Support Stand	3" H (7.6 cm), with Locking Casters	98000-386
Additional Shelf	Stainless Steel (with Installation Channel)	98000-392

## 5.3A

### VWR symphony 5.3 A Air-Jacketed CO<sub>2</sub> Incubator

<b>Technical Specifications</b>	
Temperature	
Control	±0.1°C
Range	3°C above ambient to 55°C (131°F)
Uniformity	±0.3°C @ 37°C (98.6°F)
Tracking Alarm	User-programmable high/low
Temperature Safety	
Sensor	Independent thermostat
Controller	Independent analog electronic
Setability	0.1%
CO <sub>2</sub>	
CO <sub>2</sub> Control	Better than ±0.1%
CO <sub>2</sub> Range	0-20%
Inlet Pressure Required	15 PSIG (1.0 bar)
CO <sub>2</sub> Sensor	TC or IR
Readability & Setability	0.1%
Tracking Alarm	User-programmable low
Humidity	
rH	Ambient to 95% @ 37°C (98.6°F)
Humidity Pan	0.8 gal. (3 L), standard
Fittings	
Access Port with Filter	1 1/4" (32 mm) with removable silicone plug
CO <sub>2</sub> Inlet	1/8" hose (barbed)
Unit Heat Load	
120V	273 BTU/Hr

Shelves	
Dimensions (W x D)	16.7 x 17.5" (42.3 x 44.5 cm)
Construction	Stainless steel, perforated
Surface Area	2.03 sq. ft. (0.18 sq. m)
Max. per Chamber	6.0 sq. ft. (0.54 sq. m)
Standard, Maximum	3, 10
Construction	
Interior Volume	5.3 cu. ft. (150 L)
Interior	Type 304, mirror finish, stainless steel
Exterior	18 gauge, cold-rolled steel, powder coated
Electrical	
Rated Voltage	120V, 60Hz
Circuit Breaker/Power Switch	20 Amps
Plug	NEMA 5-15
Alarm Contacts	Power interruption; deviation of temp, CO <sub>2</sub>
Data Outputs	RS 232
Dimensions	
Exterior (W x H x D)	25 x 34 x 30" (63.7 x 86.7 x 76.6 cm)
Interior (W x H x D)	18.5 x 23.9 x 20.9" (47 x 60.7 x 53 cm)
Weight	
Net	154 lbs (70 kg ) / 309 lbs (140 kg)
Shipping	165 lbs (75 kg ) / 330 lbs (150 kg)

Ordering Information		
Model	Description	Cat. No.
Single-Unit Incubators		
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor	98000-364
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor and High Temperature Decontamination	98000-362
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor	98000-368
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor and High Temperature Decontamination	98000-366
Dual-Stacked Incubators		
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor and Mobile Support Stand	98000-380
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor, High Temperature Decontamination,	98000-378
AAAD	and Mobile Support Stand	
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor and Mobile Support Stand	98000-384
VWR symphony 5.3A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor, High Temperature Decontamination, and Mobile Support Stand	98000-382
Accessories		
Support Stand	8" H (20.3 cm), with Locking Casters	82013-766
Additional Shelf	Stainless Steel (with Installation Channel)	98000-390

## 8.5A

#### VWR symphony 8.5 A Air-Jacketed CO<sub>2</sub> Incubator

Technical Specifications	
Temperature	
Control	±0.1°C
Range	3°C above ambient to 55°C (131°F)
Uniformity	±0.3°C @ 37°C (98.6°F)
Tracking Alarm	User-programmable high/low
Temperature Safety	
Sensor	Independent thermostat
Controller	Independent analog electronic
Setability	0.1%
CO <sub>2</sub>	
CO <sub>2</sub> Control	Better than ±0.1%
CO <sub>2</sub> Range	0-20%
Inlet Pressure Required	15 PSIG (1.0 bar)
CO <sub>2</sub> Sensor	TC or IR
Readability & Setability	0.1%
Tracking Alarm	User-programmable low
Humidity	
rH	Ambient to 95% @ 37°C (98.6°F)
Humidity Pan	0.8 gal. (3 L), standard
Fittings	
Access Port with Filter	1 1/4" (32 mm) with removable silicone plug
CO <sub>2</sub> Inlet	1/8" hose (barbed)
Unit Heat Load	
120V	273 BTU/Hr

Shelves	
Dimensions (W x D)	22 x 19.7" (56 x 50 cm)
Construction	Stainless steel, perforated
Surface Area	3.0 sq. ft. (0.28 sq. m)
Max. per Chamber	9.0 sq. ft. (0.84 sq. m)
Standard, Maximum	3, 10
Construction	
Interior Volume	8.5 cu. ft. (240 L)
Interior	Type 304, mirror finish, stainless steel
Exterior	18 gauge, cold-rolled steel, powder coated
Electrical	
Rated Voltage	120V, 60Hz
Circuit Breaker/Power Switch	20 Amps
Plug	NEMA 5-15
Alarm Contacts	Power interruption; deviation of temp, CO <sub>2</sub>
Data Outputs (opt.)	RS 232
Dimensions	
Exterior (W x H x D)	30.7 x 36.8 x 32.8" (78 x 93.4 x 83.4 cm)
Interior (W x H x D)	23.9 x 26.4 x 23" (60.7 x 67 x 58.3 cm)
Weight	
Net	200 lbs (85 kg)
Shipping	231 lbs (105 kg)

Model	Description	Cat. No.
Incubators		
VWR symphony 8.5A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor	98000-372
VWR symphony 8.5A Air-Jacketed CO <sub>2</sub> Incubator	With Thermal Conductivity (TC) CO <sub>2</sub> Sensor and High Temperature Decontamination	98000-370
VWR symphony 8.5A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor	98000-376
VWR symphony 8.5A Air-Jacketed CO <sub>2</sub> Incubator	With Infrared (IR) CO <sub>2</sub> Sensor and High Temperature Decontamination	98000-374
Accessories		
Support Stand	8" H (20.3 cm), with Locking Casters	98000-388
Additional Shelf	Stainless Steel (with Installation Channel)	98000-394



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