

# VWR<sup>®</sup> CHAMBERS, INCUBATORS & OVENS

Superior Temperature Accuracy

Excellent Recovery Time

Two-Year Warranty



## **VWR® CHAMBERS, INCUBATORS & OVENS**







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VWR Ovens and Incubators provide superior temperature accuracy and excellent recovery time for a wide range of demanding applications. Forced air units offer uniform heating, precise temperature control, and fast processing using a blower that circulates heated air in a horizontal airflow pattern. Gravity convection units feature a vertical airflow pattern perfect for drying samples that require a low-turbulence environment.

Contact your local VWR Sales Representative today for more information!

Need product support? VWR offers one source for all of your VWR technical product questions.

Email **TechnicalProductSupportNA@vwr.com** or call **1.888.897.5463** to speak with an expert.

## **VWR® CHAMBERS**

#### VWR® Signature<sup>™</sup> Humidity Test Chambers, Models 9005L and 9010L

These accurate and reliable chambers are ideal for long-term relative humidity (RH) and temperature-controlled testing.

- Stainless steel interior and shelves
- PID Microprocessor-controlled temperature and humidity
- LED readouts in temperature and RH
- · Access panel for easy optional chart recorder mounting
- VWR Two-Year Limited Parts and Labor Warranty

Designed to provide a wide range of environments, these units are suitable for both industrial and biotechnology specification testing, specifically continuous-duty projects. All models are equipped with a gentle horizontal air flow system, which ensures stable, top-to-bottom temperature and RH uniformity. Low temperature models 9005L and 9010L feature CFC-free refrigerant. Relative humidity range may vary depending on temperature set point.

Digitally set, microprocessor temperature and humidity controllers allow precise setting with direct digital read-out in degrees and percentage RH.

**Note:** Distilled water is exclusively recommended for use in these units; deionized or tap water will have a detrimental effect on the unit, causing corrosion, obstructions and possible premature failure of unit.

Electrical	115V, 60Hz, 2070W
Humidity Range	Ambient + 10% to 95%
Humidity Uniformity	± 1.5%
Temperature Range	10 to 70°C (50 to 158°F)
Temperature Uniformity	±0.5°C at 37°C



Description	Volume	Exterior Dimensions	Interior Dimensions	No. of Shelves	Cat. No.
Refrigerated Humidity Chamber	309 L (10 cu. ft.)	111.8L x 73.7W x 152.4H cm (44 x 29 x 60″)	76.2L x 50.8W x 76.2H cm (30 x 20 x 30")	3 (8 max.)	35912-272
Refrigerated Humidity Chamber	799 L (28 cu. ft.)	109.2L x 88.9W x 215.9H cm (43 x 35 x 85")	78.7L x 69.9W x 157.5H cm (31 x 27.5 x 62")	6 (16 max.)	35912-276



#### VWR® Signature<sup>™</sup> Diurnal Growth Chamber, Model 2015

The VWR<sup>®</sup> Signature<sup>™</sup> Diurnal Growth Incubator is designed for studies requiring day and night simulation.

- · Microprocessor temperature control
- Dual program
- · Easy keypad set and calibration
- CFC-free refrigerant
- Diurnal illumination
- Interior electrical outlet
- VWR Two-Year Limited Parts and Labor Warranty

The unit is equipped with a hermetically-sealed compressor and an independent over temperature safety controller. In addition, a one amp interior outlet allows use of shakers, stirrers, roller bottles or other apparatus. This chamber is ideal for plant growth studies.

This unit features dual-program selector dials, which allows control of two temperature conditions and an ON/OFF illumination cycle relative to the program selected. Each system operates independently allowing for simulation of a diurnal cycle, such as an eight hour day cycle of 30°C with light followed by a sixteen hour night cycle of 18°C without light. Forced air circulation ensures the most reproducible test conditions. The chamber air is gently and continuously circulated at a rate that ensures temperature uniformity (+/- 0.5°C at 20°C) of all test samples.

Exterior Dimensions (W x D x H)	92.7 x 87.6 x 199.3 cm (36.5 x 34.5 x 78.5")
Interior Dimensions (W x D x H)	68.5 x 58.4 x 143.5 cm (27.0 x 23.0 x 56.5")
Shipping Weight	172.8 kg (381 lbs.)
Temperature Uniformity	±0.5° at 20°C

Description	Electrical	Volume	No. of Shelves	Temperature Range	Cat. No.
Diurnal Growth Chamber Model 2015	115V, 1200W	467 L (16.5 cu. ft.)	4 Fixed	0 to 40°C (32 to 104°F)	35960-076



#### VWR® General Purpose Digital Laboratory Incubators, 10.8 cubic feet

General-purpose incubators deliver a degree of temperature uniformity usually found only in more expensive, application specific models.

 Features include: Microprocessor control, independent over temperature, thermostat, unique warm air jacket design, interior outlet, heated outer door, viewing door, stainless steel interior, access port

This high level of performance is due to a precise microprocessor controller and a unique warm air jacket design. Triple wall construction allows heated air to circulate within an open plenum between the inner chamber and exterior walls.

This design does not require blowers or fans within the incubator chamber where samples are susceptible to crosscontamination and the drying effects of convection. Five strategically placed heating elements, including a heated outer door, ensure uniform heating even when the incubator chamber is fully loaded.

Exterior Dimensions	108 x 68.6 x 96.6 cm (42.5 x 27 x 38")
Interior dimensions WxDxH (mm)	92W x 50.8D x 65.4H cm (36.2 x 20 x 25.7")
No. of Shelves	6 Supplied (12 Maximum)
Temperature range (°C)	Ambient +8 to 70°C
Temperature Uniformity	+/-0.35°C at 37°C

Description	Electrical	Volume	Shipping Weight	Cat. No.
VWR Incubator with Side by Side Doors 10.8 CFT (1556)	120V, 50/60Hz, 850W, 5.9A	306 L (10.8 cu.ft.)	120 lbs.	97058-224
VWR Incubator with Side by Side Doors 10.8 CFT 220V (1556-2)	220V, 50/60Hz, 850W, 5.9A	306 L (10.8 cu.ft.)	120 lbs.	97058-226

#### VWR<sup>®</sup> Signature<sup>™</sup> Reach-In Incubators

The VWR<sup>®</sup> Signature<sup>™</sup> Reach-In Incubators provide 30.8 and 38.6 cu.ft. chamber capacities while minimizing the amount of floor space used.

- Microprocessor temperature control
- Over-temperature safety protection
- Gentle air flow
- Temperature uniformity to 0.8°C
- · Four interior electrical outlets
- · Pre-wired access panel for optional chart recorder
- · VWR two-year limited parts and labor warranty

Both models are supplied with six shelves capable of supporting the weight of benchtop instruments. The air jacket design and heated outer door allows for uniform heat throughout the incubators. Both models incorporate a microprocessor controller to achieve precise temperature uniformity. An independent, secondary temperature controller offers the added security of over temperature protection. The chamber floors are reinforced to support roller apparatus or shakers. We also offer a range of optional heavy-load shelves that can handle fully loaded shakers and other lab appliances.

**Ordering Information:** Supplied with six shelves, four 110V interior electrical outlets, one access port and standard 120V electrical line cord.

No. of Shelves	6
Temperature Range	8° above ambient to 70°C (158°F)
Temperature Uniformity	±0.8° @ 37°C



Description	Electrical	Volume	Exterior Dimensions	Interior Dimensions	Cat. No.
Large Laboratory Incubator, Model 1915A	120V, 50/60Hz, 1485W, 8.5A	872 L (30.8 cu. ft.)	97.8 x 86.4 x 191.2 cm (38.5 x 34.0 x 75.3")	81.9 x 66.0 x 161.2 cm (32.2 x 26.0 x 63.5")	35962-062
Large Laboratory Incubator, Model 1915A-2	220V, 50/60Hz, 1485W, 8.5A	872 L (30.8 cu. ft.)	97.8 x 86.4 x 191.2 cm (38.5 x 34.0 x 75.3")	81.9 x 66.0 x 161.2 cm (32.2 x 26.0 x 63.5")	35962-063
Large Laboratory Incubator, Model 1925A	120V, 50/60Hz, 1650W	1092 L (38.6 cu. ft.)	105.4 x 88.3 x 222.3 cm (41.5 x 34.8 x 87.5")	88.9 x 66.0 x 186.0 cm (35.0 x 26.0 x 73.2")	35962-095
Large Laboratory Incubator, Model 1925A-2	220V, 50/60Hz, 1650W	1092 L (38.6 cu. ft.)	105.4 x 88.3 x 222.3 cm (41.5 x 34.8 x 87.5")	88.9 x 66.0 x 186.0 cm (35.0 x 26.0 x 73.2")	35962-096

## **VWR® INCUBATORS**



#### **VWR® Signature<sup>™</sup> Benchtop Shaking Incubators**

The VWR<sup>®</sup> Signature<sup>™</sup> Benchtop Shaking Incubator has a transparent hood that lifts up via a hydraulic system, so it can function in tight places.

- Microprocessor controlled
- User-adjustable stroke lengths of 1/2", 3/4" or 1"
- Stainless steel interior

Exterior Dimensions	55.9 x 64.8 x 71.2 cm (22.0 x 25.5 x 28.0")		
Platform Dimensions	43.8 x 43.8 cm (17 <sup>1</sup> / <sub>4</sub> x 17 <sup>1</sup> / <sub>4</sub> ")		
Speed Range	30-400 rpm		
Temperature Range	8° above ambient to 60°C (140°F)		
Uniformity	±0.5°C @ 37°C		
Volume	92 L (3.3 cu. ft.), chamber		



Description	Electrical	Exterior Dimensions	Cat. No.
Benchtop Shaking Incubator, Model 1570	120V, 50/60Hz, 1100W	74 W x 69 L x 104 cm H (29 W x 27 L x 41" H)	14004-300
Accessories			
Rack for 10-13 mL Test Tubes			14231-844
Rack for 14-16 mL Test Tubes			14231-846
Rack for 18-20 mL Test Tubes			14231-848
Rack for 22-25 mL Test Tubes			14231-850
Rack for 50 mL Test Tubes			14231-852
Flask Clamps, 25 mL Flasks (50 Maximum)			52202-564
Flask Clamps, 50 mL Flasks (50 Maximum)			52202-566
Flask Clamps, 125 mL Flasks (25 Maximum)			52202-568
Flask Clamps, 250 mL Flasks (25 Maximum)			52202-570
Flask Clamps, 500 mL Flasks (10 Maximum)			52202-572
Flask Clamps, 1 L Flasks (10 Maximum)			52202-574

#### **VWR®** Floor Model Shaking Incubator

Floor shaking incubators feature a unique, adjustable counterbalance weighting system to accommodate off-center loads and varying capacities and stroke lengths.

- Overtemperature protection
- Features include controls for temperature, timer, and shaker
- Small footprint

Exterior Dimensions	73 x 75 x 103 cm (29 x 29 <sup>1</sup> / <sub>2</sub> x 41")
Speed Range	30-400 rpm, ± 4 rpm (1 rpm increments)
Temperature Uniformity	±0.8°C at 37°C
Volume	144L (5 Cu. Ft.)



Description	Electrical	Temperature Range	Shipping Weight	Cat. No.
Floor Shaking Incubator 1585	120V, 50/60Hz, 1200W, 12.5A	8°C + Ambient to 60°C	118 kg (260 lbs.)	97051-680
Floor Refrigerated Shaking Incubator 1585R	120V, 50/60Hz, 1200W, 12.5A	10°C to 60°C	136 kg (300 lbs.)	97051-684
Accessories				
Flask Clamp, 2000 mL (Max 4)				14231-836
Flask Clamp, 2.8 L Fernbach (Max 2)				14231-838
Flask Clamp, 4000 mL (Max 4)				14231-840
Flask Clamp, 6000 mL (Max 2)				14231-842

#### VWR® Signature<sup>™</sup> B.O.D. Low Temperature Refrigerated Incubators, 2.4 cu.ft.

The VWR Signature Low Temperature Incubator is commonly used for applications such as B.O.D. determinations, plant and insect studies, fermentation studies, and bacterial culturing.

- Microprocessor control
- Digital display of temperature
- Easy keypad set and calibration
- Safety high/low-limit thermostat
- · Bench top or under counter installation
- · Gentle forced air circulation
- Interior electrical outlet
- VWR Two-Year Limited Parts and Labor Warranty

The low temperature incubators have a temperature range of 0°C to 45°C. Units are equipped with a hermetically-sealed compressor, a circuit breaker to protect from electrical overload, and an easy-to-clean, fully insulated chamber. Gentle, continuous forced-air circulation ensures temperature uniformity (+/-  $0.5^{\circ}$ C at 20°C) and reproducible test conditions.



Exterior Dimensions	61.0 x 53.4 x 85.8 cm (24.0 x 21.0 x 33.8")
Interior dimensions WxDxH (mm)	40.6 x 30.4 x 54.6 cm (16.0 x 12.0 x 21.5")
Temperature Range	0°C to 45°C
Volume	67 L (2.4 cu. ft.)

Description	Electrical	Cat. No.
B.O.D. Incubator 2005	120V, 50/60Hz, 400W	35960-056
B.O.D. Incubator 2005-2	220V, 50Hz, 400W	35960-057
Accessories		
Shelf for Model 2005		52201-528



#### VWR® B.O.D. Refrigerated Peltier Incubators, High Efficiency

#### New energy-saving and environmentally friendly refrigerated incubators.

- Offers a 78% reduction in energy consumption
- Provide improved temperature uniformity, digital temperature controller with display, and over temperature limit control
- · Compressor-free design

Using innovative peltier cooling technology, the VWR refrigerated incubators offer a 78% reduction in energy consumption over traditional compressor based refrigerated incubators. These incubators meet APHA specifications for Biochemical Oxygen Demand (B.O.D.) and include a mechanical convection system to provide improved temperature uniformity, digital temperature controller with display, and over temperature limit control.

Ordering Information: Three-year parts and labor warranty (domestic).

No. of Outlets	One Internal
Shelf Weight Capacity	75 lbs. each
Temperature range (°C)	15°C to 40°C at 20°C Ambient
Temperature Uniformity	+/-0.5°C at 20°C

Description	Electrical	Bottle Capacity	Capacity	Exterior Dimensions	Interior Dimensions	No. of Shelves	Cat. No.
Small B.O.D. Incubator	100-120V, 50/60Hz, 360W	60 (BOD)	85 L (3 cu. ft.)	61.2 x 53.1 x 85.9 cm (24.1 x 21.3 x 33.8")	48 x 42.9 x 67.1 cm (18.9 x 16.9 x 26.4")	2	89510-738
Small B.O.D. Incubator	220-240V, 50/60Hz, 480W	60 (BOD)	85 L (3 cu. ft.)	61.2 x 53.1 x 85.9 cm (24.1 x 21.3 x 33.8")	48 x 42.9 x 67.1 cm (18.9 x 16.9 x 26.4")	2	89510-740
Under Counter B.O.D. Incubator	100-120V, 50/60Hz, 360W	120 (BOD)	185 L (6.5 cu. ft.)	76.2W x 80D x 85.1H cm (30.0 x 31.5 x 33.5")	64.8W x 61D x 47.1H cm (25.5 x 24.0 x 18.5")	2	89510-742
Under Counter B.O.D. Incubator	220-240V, 50/60Hz, 480W	120 (BOD)	185 L (6.5 cu. ft.)	76.2W x 80D x 85.1H cm (30.0 x 31.5 x 33.5")	64.8W x 61D x 47.1H cm (25.5 x 24.0 x 18.5")	2	89510-744
Large Capacity B.O.D. Incubator	100-120V, 50/60Hz, 660W	300 (BOD)	546 L (19.3 cu. ft.)	76.2W x 80D x 176.6H cm (30.0 x 31.5 x 69.5")	64.8W x 61D x 138.4H cm (25.5 x 24.0 x 54.5")	5	89510-746
Large Capacity B.O.D. Incubator	220-240V, 50/60Hz, 840W	300 (BOD)	546 L (19.3 cu. ft.)	76.2W x 80D x 176.6H cm (30.0 x 31.5 x 69.5")	64.8W x 61D x 138.4H cm (25.5 x 24.0 x 54.5")	5	89510-748





#### VWR® Drosophila Refrigerated Peltier Incubator, High Efficiency

Using innovative peltier cooling technology, the VWR drosphila incubators offer a 78% reduction in energy consumption over traditional compressor based refrigerated incubators.

- Robust design
- Low-vibration operation
- Over-temperature thermostat and alarm

These incubators are equipped with LED Lighting and Day/Night Controls to create ideal conditions for fruit flies. The robust cabinet design includes a mechanical convection system to provide improved temperature uniformity, digital temperature controller with display, and over temperature limit control. The compressor-free design creates a low-vibration operation.

Independent over-temperature thermostat and alarm.

TUV, CE, UL, CSA.

Ordering Information: Three-year parts and labor warranty (domestic).

No. of Outlets	One Internal
Shelf Weight Capacity	75 lbs. each
Temperature Uniformity	+/-0.5°C at 20°C

Description	Electrical	Capacity	Exterior Dimensions	Interior Dimensions	No. of Shelves	Temperature Range	Cat. No.
Drosophila Incubator	110-120V, 50/60Hz, 75 Watts	185.5 L (6.55 cu. ft)	76.2 x 80.0 x 85.1 cm (30" x 31.5" x 33.5")	64.8 x 61.0 x 47.0 cm (25.5" x 24" x 18.5")	2	15°C to 40°C at 20°C Ambient	76035-956
Drosophila Incubator	220-240V, 50/60Hz, 72 Watts	185.5 L (6.55 cu. ft)	76.2 x 80.0 x 85.1 cm (30" x 31.5" x 33.5")	64.8 x 61.0 x 47.0 cm (25.5" x 24" x 18.5")	2	15°C to 40°C at 20°C Ambient	76035-958
Drosophila Incubator	100-120V, 50/60Hz, 660W	546 L (19.3 cu. ft.)	76.2 x 80.1 x 176.6 cm (30.0 x 31.5 x 69.5″)	64.7 x 60.9 x 138.4 cm (25.5 x 24.0 x 54.5")	5	15°C to 40°C at 20°C Ambient	89510-750
Drosophila Incubator	220-240V, 50/60Hz, 840W	546 L (19.3 cu. ft.)	76.2 x 80.1 x 176.6 cm (30.0 x 31.5 x 69.5")	64.7 x 60.9 x 138.4 cm (25.5 x 24.0 x 54.5")	5	15°C to 40°C at 20°C Ambient	89510-752



#### **VWR® Signature<sup>™</sup> Vacuum Oven Station**

VWR<sup>®</sup> Signature<sup>™</sup> Vacuum Oven Station has a programmable Watlow temperature controller that offers multiple ramp and soak capabilities, including storing and running up to 40 temperature profiles.

- Large 264 L (9.3 cu. ft.) capacity
- LED digital control
- VWR Two-Year Limited Parts and Labor Warranty

The controls are easily adjustable and the control panel is user-friendly. A digital vacuum gauge shows chamber vacuum level in measurements of Torr and m/Torr. The display range is 760 Torr down to 0 mm Torr. A secondary independent high limit controller provides overtemperature safety protection.

The oven chamber is wrapped in high temperature insulation which aids overall performance and promotes energy efficiency. Powder coat construction, true vacuum valves and cross-flow ventilation through the oven chamber enhance total performance. The vacuum oven is secured to a ruggedly constructed mobile stand that can store a vacuum pump which saves lab space. Although the oven is not supplied with a vacuum pump, all vacuum plumbing and KF25 connections are provided.

Heat-up time is 1.5 hours at 150°C. Includes nitrogen purge port, 38mm (11/2") access port, and auxiliary vacuum port.

Ordering Information: Supplied with three aluminum shelves. IQ/OQ Validation services are available, contact your VWR sales representative for further information.

Electrical	240V, 50/60Hz, 3840W, 16A
Exterior Dimensions	91.5 x 118.2 x 157.5 cm (36.0 x 46.5 x 62.0")
Interior dimensions WxDxH (mm)	71.1 x 60.9 x 60.9 cm (28.0 x 24.0 x 24.0")
Temperature Range	5° above ambient to 220°C (9° above ambient to 428°F)
Temperature Uniformity	±7°C at 150°C

Description	Volume	Cat. No.
Vacuum Oven Station	264 L (9.3 cu. ft.)	15001-112

#### **VWR® Vacuum Oven, Stainless Steel**

All vacuum ovens are built with a stainless steel chamber for exceptional durability.

- Fully programmable Watlow temperature control
- Capable of 40-step ramp and soak profiles or 4 files With 10 steps per file
- Digital vacuum gauge
- RS485 communication

VWR's double plenum design meets UL, CSA and CE safety requirements resulting in a cool outer surface.

The doors on these units have positive latch handles with spring-loaded glass to facilitate a good vacuum seal without hinge binds that shorten the gasket life. A selection of gaskets (for specific applications) and a small benchtop footprint increase the versatility of these ovens.

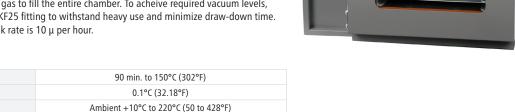
The unique cross-flow ventilation forces inert gas to fill the entire chamber. To acheive required vacuum levels, users can choose from a 3/8 inch orifice or a KF25 fitting to withstand heavy use and minimize draw-down time. Maximum permitted end vacuum is 10  $\mu$ . Leak rate is 10  $\mu$  per hour.

UL, CSA and CE

Heat-up time **Temperature Control** 

**Temperature Range** 

Temperature Uniformity



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Description	Electrical	Volume	Exterior Dimensions	Interior Dimensions	No. of Shelves	Cat. No.	
Vacuum Oven (1490)	120V, 1500W, 12.5A, 50/60Hz	127 L (4.5 cu. ft.)	78W x 77.7D x 68.1H cm (30.7 x 30.6 x 26.8")	45.7W x 60.9D x 45.7H cm (18 x 24 x 18")	3	97027-664	
Vacuum Oven (1490-2)	220V, 1500W, 7.0A, 50/60Hz	127 L (4.5 cu. ft.)	78W x 77.7D x 68.1H cm (30.7 x 30.6 x 26.8")	45.7W x 60.9D x 45.7H cm (18 x 24 x 18")	3	97027-674	

+6 % of Set point







#### VWR<sup>®</sup> Signature<sup>™</sup> Forced Air Safety Ovens

These microprocessor-controlled forced air units are equipped with a blow-out back panel to protect the user from injury.

- Microprocessor control system
- Over-temperature safety limit, manual restart
- Rear blow-out panel
- Heavy-gauge steel construction for durability
- VWR® Two-Year Limited Parts and Labor Warranty

The panel is designed to release in the event of an explosion, directing the force away from the user. A resettable circuit breaker prevents accidental setting changes in case of electrical malfunction. An over-temperature safety limit requires manual restart to protect both the user and unit.

Other features include electronic timer, heavy-duty adjustable door latch and hinges, and 7.6 cm (3") diameter exhaust port with adjustable damper. All ovens are manufactured using heavy gauge steel exteriors with continuous welded seams and corners for long-term durability. The powder coat enamel exterior has a high resistance to moisture, oil and chemicals.

Unfiltered power exhaust accessory (**52201-344**) is available for fast drying, to exhaust fumes from the lab, or to pull moisture out of high-temperature samples. Can be operated at the end of program for fast cool down, or during all or part of program. If attached, power exhaust can be activated by the controller.

Caution: Unit is not explosion-proof and will not prevent combustibles from exploding. The rear blow-out panel is only an added safety measure. Always use extreme caution when mixing heat and any source of volatile substances in any oven. Use with any volatile substance, material, or residual fumes beyond flashpoint may cause substances to ignite while placed in any oven. Check with your chemical source to ensure safe operational temperature ranges and mixtures while using in conjunction with any heat source. Always exercise extreme caution when handling combustible materials.

Ordering Information: Supplied with three-prong power cord and two stainless steel shelves.

Recovery	5 min. @ 110°C (230°F), 8 min. @ 170°C (338°F)
Temperature Control	0.05°C
Temperature Range	40 to 240°C (104 to 464°F)
Temperature Uniformity	±1.5° @ 110°C, ±1.9° @ 170°C

Description	Electrical Volume Exterior Dimensions			Interior Dimensions	Shipping Weight	Cat. No.
Horizontal Air Flow Oven (1330FMS)	110V, 50/60Hz, 1750W	45 L (1.6 cu. ft.)	54.6W x 62.2D x 83.8H cm (21 <sup>1</sup> / <sub>2</sub> x 24 <sup>1</sup> / <sub>2</sub> x 33")	33.0W x 35.6D x 37.5H cm (13 x 14 x 14 <sup>3</sup> / <sub>4</sub> ")	74.8 kg (165 lbs.)	52201-214
Horizontal Air Flow Oven (1350FMS)	110V, 50/60Hz, 2000W	115 L (4 cu. ft.)	70W x 68.6D x 88.3H cm (27 <sup>1</sup> / <sub>2</sub> x 27 x 34 <sup>3</sup> / <sub>4</sub> ")	45.7W x 48.3D x 41.9H cm (18 x 19 x 16 <sup>1</sup> /2")	97.5 kg (215 lbs.)	52201-216
Accessories	For L	lse With				
Power Exhaust, 110V	Mode	el 1310, 1320; All 1330,	1350, and 1370 Ovens			52201-344

#### **VWR® Signature™ High-Performance Horizontal Air Flow Ovens**

Horizontal airflow is created using a turbo blower that re-circulates air over the heating element, providing fast heat-up and recovery times, and ensuring a more rapid and efficient rate of drying.

- True horizontal airflow design
- Programmable 24-step ramp and soak controller
- Type-304 stainless steel interior and exterior
- Durable powder-coat paint exterior finish
- Three-inch intake and exhaust ports
- Equipped with adjustable stainless steel shelves
- VWR® Two-Year Limited Parts and Labor Warranty

By forcing continuously warmed air into the chamber, the turbo blower assures uniform heating across all shelves and to every area of the chamber, eliminating concerns of obstructed air, regardless of how the shelves are loaded. The Watlow<sup>®</sup> microprocessor-based controller provides 24-step ramp and soak capability to an accuracy of 0.1°C. Other ramping operations include ramp-rate or time-based programming, guaranteed soak deviation, program looping, and program status selection after power outages. Easy, non-ramping set point operation is also available. Temperature range: 40 to 260°C (104 to 500°F).

To maintain temperature uniformity and stop heat loss, a 8.9 cm  $(3^{1}/2^{"})$  thick, double-layer insulating barrier of high-density alumina silicate and high-temperature fiberglass wraps around all five sides of the chamber. A high temperature silicone rubber door seal eliminates air leakage. In addition, the door latch and hinges are user-adjustable to maintain a better seal as metal expands and contracts over the life of the oven.

Ordering Information: Supplied with adjustable stainless steel shelves.



Description	Electrical	Volume	Exterior Dimensions	Interior Dimensions	Heat-Up Time	No. of Shelves	Recovery Rate	Temperature Uniformity	Cat. No.
Benchtop with Two Doors (1680)	220V, 50/60Hz, 5700W, 26A	392 L (13.8 cu.ft.)	150.0 x 73.7 x 144.8 cm (59.0 x 29.0 x 57.0")	111.0 x 52.0 x 91.0 cm (44.0 x 20.5 x 36.0")	22 min. to reach 180°C	6	6 min. at 110°C (10 min. at 180°C)	±1.5°C at 110°C	52202-203
Floor Model (1685)	220V, 50/60Hz, 11,000W, 50A	793 L (28 cu.ft.)	109.3 x 87.0 x 217.2 cm (43.0 x 34.3 x 85.5")	95.2 x 66.0 x 153.6 cm (37.5 x 26.0 x 60.5")	20 min. to reach 180°C	6	4 min. at 100°C, 8 min. at 180°C	±1.5°C at 110°C	52202-258
Floor Model with Two Doors (1690)	220V, 50/60Hz, 11,000W, 50A	1083 L (38 cu.ft.)	174.0 x 85.8 x 199.4 cm (68.5 x 33.8 x 78.5")	121.9 x 64.7 x 137.1 cm (48.0 x 25.5 x 54.0")	28 min. to reach 180°C	12	12 min. at 110°C, 15 min. at 180°C	±2.0°C at 110°C	52202-509
Accessories			Model						
Fan Motor, Shaft Up			Models 1680, 168	85, 1690					87006-102
Fuse, 16A/250V, Type T			Models 1680, 168	85, 1690					87006-400

# ALL YOU NEED FOR ANALYTICAL CHEMISTRY

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#### **VWR® Signature<sup>™</sup> Depyrogenation Oven**

Oven features PID/microprocessor control and mechanical convection horizontal air flow.

- Ideal for Small Applications
- PID/Microprocessor Controlled
- VWR® Limited Two-Year Parts and Labor Warranty

A DT HT filter on the air intake side facilitates removal of airborne gram-negative bacteria. A plugged door provides maximum insulation and heat retention. Easy-to-read LED timer times up to 99 hours, 59 minutes, counts down "backward", and disengages the element at the end of set time. Air flow is rated at 144lfm, which ensures quick, even drying of glassware. To ensure complete depyrogenation, the oven should be used in conjunction with a sterilizer and proper depyrogenation procedures for rendering glassware pyrogen-free.

**Ordering Information:** Supplied with two 1.9 cm  $(^{3}/_{4}'')$  thick shelves. Additional shelves and accessories sold separately.



Description	Electrical	Volume	Chamber Dimensions	Exterior Dimensions	Temperature Range	<b>Temperature Uniformity</b>	Shipping Weight	Cat. No.
Depyrogenation Oven	220V, 2000W	142 L (5 cu. ft.)	58.4W x 53.3D x 45.7H cm (23 x 21 x 18")	80W x 64D x 89H cm (31 <sup>1</sup> / <sub>2</sub> x 25 <sup>1</sup> / <sub>4</sub> x 35")	40 to 260°C (104 to 500°F)	±2°C @ 250°C	113.4 kg (250 lbs.)	13309-458
Accessories	Accessories For Use With							
Shelf			All Model 13	70 Ovens				52200-331
Chart Recorder Bracket	Bracket All Model 1370 Ovens							52202-576
Replacement Filter	t Filter			70 Ovens				52202-578

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