VWR Constant Temperature Ovens

When you want to put heat on, there’s no better choice than VWR Ovens.

Clockwise from left: Model 1685, Model 1380FM and Model 1410.
The VWR Signature High Performance Ovens feature a horizontal airflow pattern that dries, bakes or cures...no matter what size the load. They offer precise state-of-the-art temperature control.

Horizontal airflow uses 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. 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 about obstructed air, regardless of how the shelves are loaded.

This true one-pass airflow combined with large adjustable intake and exhaust vents makes it easy to adapt the oven to specific tasks. It also makes these the fastest, most energy efficient ovens on the market today.

**Programmable temperature controller.**

The Watlow 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.
Energy efficient to help lower operating costs.

To maintain temperature uniformity and stop heat loss, VWR Signature Series Ovens use a 3/4-inch thick, double-layer-insulating barrier of high-density alumina silicate and high temperature fiberglass around all five sides of the chamber. The double-layer configuration will not break down or settle from heat exposure, so years from now you still expect this oven to perform. What’s more, seams are staggered to avoid gaps and subsequent heat loss, thus ensuring the oven is cool to the touch. 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. These features allow VWR Ovens to finish their work when you do, so you don’t need to leave them on overnight.

Low maintenance motor.

Motor burn out is a common source of oven down time. The unique VWR design helps eliminate this problem by using a second fan to dissipate heat away from motor bearings. Since bigger bearings generally operate longer than little ones, VWR uses an oversized motor with oversize bearings to increase the longevity of the motor. Furthermore, to minimize heat transfer from the oven chamber to the motor, a half-inch diameter stainless steel shaft replaces the metal shaft that comes standard with motors because stainless is not a good conductor.

Safety features.

The independent over-temperature safety feature is user adjustable and protects the unit against damage to contents and burnout in the unlikely event that the main controller fails. The sealed membrane touch-pad control panel guards against any harm to the electronics.

Key features:

- Type-304 stainless steel interior and exterior for maximum corrosion resistance
- Durable powder coat paint exterior finish
- Three-inch intake and exhaust ports
- Adjustable stainless steel shelves
- Power exhaust accessory can be plugged into unit and run by Watlow controller
- Chart recorder outlet available on Models 1675, 1680, 1685 and 1690
- 24 month warranty on parts and labor

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Temperature Style</th>
<th>Range</th>
<th>Heat Up, Uniformity</th>
<th>Recovery, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52201-754</td>
<td>1670</td>
<td>4.4</td>
<td>Medium, 2 Shelves</td>
<td>40°C to 260°C</td>
<td>±0.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 20 x 20 x 19</td>
<td>3000/12.5</td>
</tr>
<tr>
<td>52202-054</td>
<td>1675</td>
<td>10.4</td>
<td>Large, 3 Shelves</td>
<td>40°C to 260°C</td>
<td>±1.0; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 30 x 20 x 30</td>
<td>6300/26.5</td>
</tr>
<tr>
<td>52202-203</td>
<td>1680</td>
<td>14.6</td>
<td>Large, 2 Door, 6 Shelves</td>
<td>40°C to 260°C</td>
<td>±1.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 42 x 20 x 30</td>
<td>6300/26.5</td>
</tr>
<tr>
<td>52202-258</td>
<td>1685</td>
<td>25.0</td>
<td>Floor, 6 Shelves</td>
<td>40°C to 260°C</td>
<td>±1.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 32 x 25 x 67.25</td>
<td>11,900/49.6</td>
</tr>
<tr>
<td>52202-509</td>
<td>1690</td>
<td>37.9</td>
<td>Floor, 2 Door, 12 Shelves</td>
<td>40°C to 260°C</td>
<td>±2.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 44 x 25 x 54</td>
<td>11,900/49.6</td>
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<tr>
<td>16000-220</td>
<td>1680-3</td>
<td>14.6</td>
<td>Large, 2 Door, 6 Shelves, 3-Phase</td>
<td>40°C to 260°C</td>
<td>±2.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 42 x 20 x 20</td>
<td>5000/12</td>
</tr>
<tr>
<td>16000-222</td>
<td>1685-3</td>
<td>25.0</td>
<td>Floor, 6 Shelves, 3-Phase</td>
<td>40°C to 260°C</td>
<td>±2.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 32 x 25 x 67.25</td>
<td>10,000/24</td>
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<tr>
<td>16000-224</td>
<td>1690-3</td>
<td>37.9</td>
<td>Floor, 2 Door, 12 Shelves, 3-Phase</td>
<td>40°C to 260°C</td>
<td>±2.5; C @ 100, C</td>
<td>15 @ 100; C</td>
<td>Int: 44 x 25 x 54</td>
<td>10,000/24</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. V Volts: 208/230 V Cycle 50/60Hz
Units must be hardwired. Power cord not supplied.

See page 19 for price information.
The VWR Signature Horizontal Airflow Ovens use the same turbo blower system as our high performance models to deliver optimal temperature uniformity and recovery. The built-in microprocessor technology ensures stable control without temperature overshoot.

VWR Signature™
Horizontal Airflow Ovens

True horizontal airflow for fast uniform drying, curing and baking

Model 1350FM
Unique airflow design.

With the true horizontal airflow design, heated air is directed into the ductwork on the right side of the oven. This slightly pressurized air escapes through the small perforations in the chamber wall, flows across each shelf picking up moisture, and is gently suctioned through large openings on the opposite chamber wall. This pattern encourages fast, uniform drying even when your shelves are loaded.

Convenient digital timer.

The digital LED electronic timer is conveniently located on the control panel and gives the user the capability of automatically turning off the oven at the end of an application cycle. The timer has a range of 1 minute to 99 hours/59 minutes and is activated by an independent ON/OFF switch.

Built-in safety features.

There are no exposed heating elements in this oven series. This eliminates danger to the user and damage to the oven from spills within the chamber. An independent overtemperature safety controller with its own sensor provides extra protection.

Flexibility.

Ovens are used for three main purposes: drying, baking and curing. By positioning the damper on the exhaust port accordingly, the user can accomplish all three types of applications. The exhaust port is 3-inches indiameter, further aiding in drying time.

Key features:

- True horizontal airflow pattern
- Three inch adjustable exhaust port
- Stainless steel interior and shelves
- Durable powder coat paint exterior finish
- Adjustable door latch and hinges
- Digital electronic timer
- Wrap around insulation for excellent heat retention
- 24 month warranty on parts and labor

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<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Recovery, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
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<tbody>
<tr>
<td>52201-069</td>
<td>1330FM</td>
<td>1.6</td>
<td>Small, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 13 x 14 x 14.75 Ext: 21.25 x 23.75 x 33</td>
<td>1750/14.6</td>
</tr>
<tr>
<td>52201-084</td>
<td>1330FM-2</td>
<td>1.6</td>
<td>Small, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 13 x 14 x 14.75 Ext: 21.25 x 23.75 x 33</td>
<td>2350/9.8</td>
</tr>
<tr>
<td>52201-070</td>
<td>1350FM</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5 Ext: 27 x 25.5 x 34.75</td>
<td>1950/16.3</td>
</tr>
<tr>
<td>52201-086</td>
<td>1350FM-2</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5 Ext: 27 x 25.5 x 34.75</td>
<td>2350/9.8</td>
</tr>
<tr>
<td>52201-071</td>
<td>1370FM</td>
<td>5.9</td>
<td>Large, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 23 x 20 x 18.5 Ext: 32.5 x 28 x 36.25</td>
<td>1950/16.3</td>
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<tr>
<td>52201-088</td>
<td>1370FM-2</td>
<td>5.9</td>
<td>Large, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±1.5°C @ 150°C</td>
<td>10 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 23 x 20 x 18.5 Ext: 32.5 x 28 x 36.25</td>
<td>2350/9.8</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. • Cycle 50/60Hz • Phase Single

See page 19 for price information.
Optimum control.

The Models 1321F, 1325F, and 1327F feature an hydraulic temperature control, while the large capacity Models 1380FM and 1390FM have a microprocessor controller. The independent overtemperature safety feature is user adjustable and provides added safety for the user.

Optimum uniformity.

The forced, blower-assisted airflow design offers excellent temperature uniformity and fast recovery. A turbo blower and heavy-duty motor combine to direct air over the shelves and samples for even, consistent drying, curing and baking. Especially ideal for glassware drying.

Broad product offering.

There are several models to choose from in the forced air product line, both in size and control. The large capacity units are perfect for high volume sample and drying applications, including production processes.

Key features:

- Three-inch adjustable exhaust port
- Stainless steel shelves adjustable on ½" increments
- Independent overtemperature safety
- High temperature silicone door seal
- No exposed heating elements
- Wrap around insulation for excellent heat retention
- Durable powder coat paint exterior finish
- Digital timer (Models 1380FM, 1390FM)
- Thermometer and clip supplied (Models 1321F, 1325F, 1327F)
- 24 month warranty on parts and labor

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>16000-208</td>
<td>1321F</td>
<td>2.0</td>
<td>Small, 1 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 16.875 x 12.5 x 17</td>
<td>800/6.6</td>
</tr>
<tr>
<td>16000-210</td>
<td>1321F-2</td>
<td>2.0</td>
<td>Small, 1 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 20.25 x 21 x 25</td>
<td>800/3.3</td>
</tr>
<tr>
<td>16000-212</td>
<td>1325F</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 15.875 x 17.5 x 22</td>
<td>800/6.6</td>
</tr>
<tr>
<td>16000-214</td>
<td>1325F-2</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 23.25 x 20 x 31</td>
<td>800/3.3</td>
</tr>
<tr>
<td>16000-216</td>
<td>1327F</td>
<td>6.0</td>
<td>Large, 2 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 19.875 x 17.5 x 28</td>
<td>1050/8.8</td>
</tr>
<tr>
<td>16000-218</td>
<td>1327F-2</td>
<td>6.0</td>
<td>Large, 2 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22 @ 100°C</td>
<td>Int: 24 x 23.625 x 37</td>
<td>1050/4.4</td>
</tr>
<tr>
<td>52201-075</td>
<td>1380FM</td>
<td>13.9</td>
<td>Large, 3 Shelves, 110V, Microprocessor</td>
<td>40°C to 200°C</td>
<td>±1.8°C @ 100°C</td>
<td>14 @ 150°C</td>
<td>Int: 31 x 25 x 31</td>
<td>3950/16.5</td>
</tr>
<tr>
<td>52201-077</td>
<td>1390FM</td>
<td>27.8</td>
<td>Large, 6 Shelves, 220V, Microprocessor</td>
<td>40°C to 200°C</td>
<td>±1.8°C @ 100°C</td>
<td>14 @ 150°C</td>
<td>Int: 31 x 25 x 62</td>
<td>5950/25</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. • Cycle: 50/60Hz • Phase: Single
NOTE: Models 1380FM and 1390FM available only in 220V current.

See page 19 for price information.
Microprocessor technology and a unique air duct system provide you with outstanding temperature control and uniformity in these VWR Signature Gravity Convection ovens.

### Stability and safety.

The microprocessor controller with push button calibration provides precise temperature and time setability. The controller even retains set points during power outages. The temperature and timer are displayed digitally on an easy to read LED.

### Digital timer.

The digital LED electronic timer gives the user the capability of automatically turning off the oven at the end of an application cycle. The timer has a range of 1 minute to 99 hours/59 minutes and is activated by an independent ON/OFF switch.

### Unique heating system.

As air is heated in the gravity convection design, it rises to the top of the oven. The heated air is directed through an air duct system and enters the chamber through slots above each shelf. Even when shelves are fully loaded, this exclusive feature creates many different flow patterns to optimize uniformity. The exhaust port, located on top of the oven, aids in venting the oven and allows for flexibility in drying time.

### Built-in safety.

A solid chamber floor eliminates danger to the user and prevents damage to the oven from spills, as there are no exposed elements. A resettable circuit breaker is standard in case of electrical malfunction. The overtemperature safety is UL approved, user adjustable and independent of the main temperature controller.

### Key features:

- Microprocessor control system
- Digital electronic timer
- Three-inch adjustable exhaust port
- Stainless steel interior and shelves
- Durable powder coat paint exterior finish
- Adjustable door latch and hinges
- Wrap around insulation for excellent heat retention
- 24 month warranty on parts and labor

### VWR Signature™ Gravity Convection Ovens

*Designed for optimal temperature uniformity*

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**VWR Signature™ Gravity Convection Ovens**

**Capacity, Temperature Heat Up, Recovery, Dimensions*, Watts/Amps**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Recovery, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52200-205</td>
<td>130GM</td>
<td>1.6</td>
<td>Small, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 13 x 14 x 14.75, Ext: 21.25 x 23.75 x 33</td>
<td>1400/11.7</td>
</tr>
<tr>
<td>52200-216</td>
<td>130GM-2</td>
<td>1.6</td>
<td>Small, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 13 x 14 x 14.75, Ext: 21.25 x 23.75 x 33</td>
<td>2000/8.4</td>
</tr>
<tr>
<td>52200-209</td>
<td>135GM</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5, Ext: 27 x 25.5 x 34.75</td>
<td>1600/13.4</td>
</tr>
<tr>
<td>52200-218</td>
<td>135GM-2</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5, Ext: 27 x 25.5 x 34.75</td>
<td>2000/8.4</td>
</tr>
<tr>
<td>52200-215</td>
<td>1370GM</td>
<td>5.9</td>
<td>Large, 2 Shelves, 110V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 23 x 20 x 18.5, Ext: 32.5 x 28 x 36.25</td>
<td>1600/13.4</td>
</tr>
<tr>
<td>52200-220</td>
<td>1370GM-2</td>
<td>5.9</td>
<td>Large, 2 Shelves, 220V</td>
<td>40°C to 240°C</td>
<td>±2.0°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>10 @ 150°C</td>
<td>Int: 23 x 20 x 18.5, Ext: 32.5 x 28 x 36.25</td>
<td>2000/8.4</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. Cycle: 50/60Hz. Phase Single.

See page 19 for price information.
Economically priced, yet have the features required for professional results in the lab. As with all VWR ovens, these units are durable and built to last.

**Reliable performance.**

These VWRbrand ovens feature a gravity convection design for efficient heating. The double wall insulation and two inches of industrial fiberglass insulation help to minimize heat loss. The low watt density heaters keep temperatures uniform to ±4.0°C and require only 750 watts...keeping your energy consumption down.

**Analog design.**

A hydraulic temperature controller regulates a temperature range of 40 to 200°C. An independent hydraulic overtemperature safety controller provides added operating safety.

### Key features:

- Three-inch adjustable exhaust port
- Stainless steel shelves adjustable on 1/2" increments
- Independent hydraulic overtemperature safety
- High temperature silicone door seal
- No exposed heating elements
- Wrap around insulation for excellent heat retention
- Durable powder coat paint exterior finish
- Thermometer and clip supplied
- CSA approved
- 24 month warranty on parts and labor

### VWRbrand GRAVITY CONVECTION OVENS

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
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<th>Heat Up, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52201-297</td>
<td>1310</td>
<td>1.0</td>
<td>Small, 1 Shelf, 110V</td>
<td>40°C to 200°C</td>
<td>±4.0°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 12 x 12 x 12</td>
<td>750/6.25</td>
</tr>
<tr>
<td>52201-298</td>
<td>1310-2</td>
<td>1.0</td>
<td>Small, 1 Shelf, 110V</td>
<td>40°C to 200°C</td>
<td>±4.0°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 12 x 12 x 12</td>
<td>800/3.3</td>
</tr>
<tr>
<td>52201-300</td>
<td>1320</td>
<td>2.0</td>
<td>Small, 2 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±4.0°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 17 x 12 x 17</td>
<td>750/6.25</td>
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<tr>
<td>52201-301</td>
<td>1320-2</td>
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<td>Small, 2 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±4.0°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 17 x 12 x 17</td>
<td>800/3.3</td>
</tr>
<tr>
<td>16000-200</td>
<td>1324</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 15.875 x 17.5 x 22</td>
<td>750/6.3</td>
</tr>
<tr>
<td>16000-202</td>
<td>1324-2</td>
<td>4.0</td>
<td>Medium, 2 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 15.875 x 17.5 x 22</td>
<td>750/3.3</td>
</tr>
<tr>
<td>16000-204</td>
<td>1326</td>
<td>6.0</td>
<td>Large, 2 Shelves, 110V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 19.875 x 17.5 x 28</td>
<td>1000/8.3</td>
</tr>
<tr>
<td>16000-206</td>
<td>1326-2</td>
<td>6.0</td>
<td>Large, 2 Shelves, 220V</td>
<td>40°C to 200°C</td>
<td>±3.5°C @ 100°C</td>
<td>22@100°C</td>
<td>Int: 19.875 x 17.5 x 28</td>
<td>1000/4.2</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. • Cycle: 50/60Hz • Phase: Single

See page 19 for price information.
Utility ovens feature a welded steel, insulated wall construction to keep the interior temperature uniform to ±4.0°C. Suitable for small work volumes.

**Efficient performance.**

Ovens achieve peak efficiency with less energy, lowering your electric costs. Temperature range is 40 to 180°C, regulated by a timed temperature controller. The bi-metal overtemperature safety feature protects against the possible main controller failure.

**Key features:**

- Three-inch adjustable exhaust port
- Flat punched shelves adjustable on 1⁄2” increments
- Independent bi-metal overtemperature safety
- Two inches of fiberglass insulation
- No exposed heating elements
- Safety circuit breaker
- Durable powder coat paint exterior finish
- Thermometer and clip supplied
- CSA approved
- 24 month warranty on parts and labor

---

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Temperature Style</th>
<th>Range</th>
<th>Dimensions*, Uniformity</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52200-501</td>
<td>1300U</td>
<td>1.0</td>
<td>Small, 1 Shelf, 110V</td>
<td>40°C to 180°C</td>
<td>±6.0°C @ 100°C</td>
<td>550/4.6</td>
</tr>
<tr>
<td>52200-502</td>
<td>1300U-2</td>
<td>1.0</td>
<td>Small, 1 Shelf, 220V</td>
<td>40°C to 180°C</td>
<td>±6.0°C @ 100°C</td>
<td>500/2.1</td>
</tr>
<tr>
<td>52200-534</td>
<td>1305U</td>
<td>2.0</td>
<td>Small, 1 Shelf, 110V</td>
<td>40°C to 180°C</td>
<td>±6.0°C @ 100°C</td>
<td>550/4.6</td>
</tr>
<tr>
<td>52200-535</td>
<td>1305U-2</td>
<td>2.0</td>
<td>Small, 1 Shelf, 220V</td>
<td>40°C to 180°C</td>
<td>±6.0°C @ 100°C</td>
<td>500/2.1</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. • Cycle: 50/60Hz • Phase: Single

See page 19 for price information.
Unique safety design.

Built to the same specifications as the VWR Signature Ovens, these units feature a blow out back panel to better meet safety standards. The blow out back panel is designed to release in the event of an explosion within the chamber, directing the force away from the user and the lab. The user adjustable overtemperature control is an added safety feature.

Accurate control and heating.

All models are microprocessor controlled and the temperature is displayed digitally on an LED. The Model 1330GMS features a gravity convection design, while Model 1330FMS and 1350FMS are true horizontal airflow ovens.

Key features:

- Unique blow out back panel
- Microprocessor temperature controller
- Stainless steel interior and shelves
- Three-inch exhaust port
- Horizontal airflow or gravity convection
- Durable powder coat paint exterior finish
- Independent overtemperature safety
- 24 month warranty on parts and labor

Manufactured with additional features to help you better meet your safety requirements.

See page 19 for price information.
Encapsulated insulation.

Insulation is encapsulated between fully welded air-tight seams so fibers cannot invade the chamber and contaminate your work.

Nitrogen purging system.

A nitrogen supply inlet is standard on both models. This creates a dry, oxygen-free atmosphere in order to reduce product oxidation. The pressurizing action of the nitrogen also inhibits the entry of contaminants.

Programmable controller.

The Watlow PID (Proportional Integral Differential) controller provides 24-step ramp and soak with an accuracy of 0.1°C and multiple levels of access. The controller can input up to a 24-step program with time-based or ramp-rate programming.

Class 100 air.

The Model 1601 is equipped with a high efficiency particulate air (HEPA) filter to screen out 95% of the airborne particles as small as 0.3 microns. Plus, the stainless steel interior surface minimizes particulates as well.

Key features:

- Nitrogen purging capability
- Type-304 stainless steel interior and exterior parts
- Sealed membrane touch pad control panel protects electronics
- Encapsulated insulation
- Programmable temperature controller
- Three-inch adjustable intake and exhaust ports
- User adjustable overtemperature safety
- 24 month warranty on parts and labor

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range °C</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Recovery, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52201-721</td>
<td>1601</td>
<td>3.7</td>
<td>Single Door, 2 Shelves, HEPA Filter</td>
<td>40°C to 200°C</td>
<td>±0.7°C @ 100°C, ±1.8°C @ 200°C, ±2.2°C @ 260°C</td>
<td>15 @ 100°C, 25 @ 200°C</td>
<td>6 @ 150°C, 8 @ 200°C</td>
<td>Int: 16 x 16 x 19, Ext: 32.5 x 27.25 x 38</td>
<td>4200/16.7</td>
</tr>
<tr>
<td>52201-710</td>
<td>1602</td>
<td>4.4</td>
<td>Single Door, 2 Shelves</td>
<td>40°C to 200°C</td>
<td>±0.5°C @ 100°C, ±1.5°C @ 200°C</td>
<td>10 @ 100°C, 20 @ 200°C</td>
<td>4 @ 150°C, 6 @ 200°C</td>
<td>Int: 20 x 20 x 19, Ext: 32.5 x 27.25 x 38</td>
<td>4200/16.7</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. Volts: 208/230 • Cycle 50/60Hz • Phase: Single

See page 19 for price information.
Versatile.

Designed to operate at depyrogenation temperatures of 230°C - 250°C, this oven is perfect for small applications and cost-conscious labs. The Model 1365 is also ideal for molecular biologists working with RNA and pharmaceutical and diagnostic firms dealing with gene therapy.

High performance filtration.

The oven features a DT HT filter on the air intake side which facilitates removal of airborne gram negative bacteria. Filter scores 40-50% on the ASHRE dust spot test.

Maximum heat retention.

A plugged door provides maximum insulation and heat retention. Model 1365 also features mechanically convected horizontal air flow. Air flow is rated at 144 LFM ensuring quick, even drying of glassware.

Microprocessor controlled.

The Depyrogenation Oven is PID/Microprocessor controlled. Easy-to-read LED timer lets you set application times up to 99 hours, 59 minutes, counts down “backward” and disengages the element at the end of set time.

Complete depyrogenation.

To insure complete depyrogenation, Model 1365 should be used in conjunction with a sterilizer and proper depyrogenation procedure for rendering glassware pyrogen-free (as described in USP manual, Vol. 23).

Key features:

- Ideal for small applications
- Maximum heat retention
- PID/microprocessor controlled
- 24 month warranty on parts and labor

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>13309-458</td>
<td>1365/220V</td>
<td>5.0</td>
<td>Small, 2 Shelves</td>
<td>40°C to 260°C</td>
<td>±2.0°C @ 250°C</td>
<td>Int: 25 x 21 x 18</td>
<td>2000/9.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ext: 16 x 17.5 x 18.5</td>
<td></td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. • Cycle: 50/60Hz • Phase: Single

See page 19 for price information.
**Unique design.**

The all stainless steel housing, screws and electronic control boards in these units are treated with a protective coating to guard against such damage caused by these materials and extend the life of your oven.

**Mechanical or gravity convection.**

Both mechanical and gravity convection are available in this product line. The models with the "FZZ" suffix feature the true horizontal airflow for superior temperature uniformity. These units use a durable turbo blower system and non-exposed heating elements. Models with the "GZZ" suffix are gravity convection designs.

---

**Key features:**

- Microprocessor temperature controller
- Stainless steel interior and shelves
- Three-inch exhaust port
- Horizontal airflow or gravity convection
- Durable powder coat paint exterior finish
- Independent overtemperature safety
- 24 month warranty on parts and labor

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**VWR Signature™ Asphalt/Corrosive Material Ovens**

Designed to withstand corrosion and damaging fumes

Manufactured specifically to resist the corrosive nature and damaging fumes of asphalt and other materials.

---

**VWR SIGNATURE ASPHALT/CORROSIVE OVENS**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Recovery, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52202-580</td>
<td>1330GZZ</td>
<td>1.6</td>
<td>Small, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 13 x 14 x 14.75</td>
<td>1400/11.7</td>
</tr>
<tr>
<td>52202-582</td>
<td>1350GZZ</td>
<td>4.0</td>
<td>Medium, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5</td>
<td>1600/13.4</td>
</tr>
<tr>
<td>52202-584</td>
<td>1370GZZ</td>
<td>5.9</td>
<td>Large, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 23 x 20 x 18.5</td>
<td>1600/13.4</td>
</tr>
<tr>
<td>52202-590</td>
<td>1330FZZ</td>
<td>1.6</td>
<td>Small, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 13 x 14 x 14.75</td>
<td>1950/16.3</td>
</tr>
<tr>
<td>52202-592</td>
<td>1350FZZ</td>
<td>4.0</td>
<td>Medium, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 18.25 x 19 x 16.5</td>
<td>1950/16.3</td>
</tr>
<tr>
<td>52202-594</td>
<td>1370FZZ</td>
<td>5.9</td>
<td>Large, 2 Shelves</td>
<td>40°C to 250°C</td>
<td>±1.5°C @ 150°C</td>
<td>15 @ 150°C</td>
<td>6 @ 150°C</td>
<td>Int: 23 x 20 x 18.5</td>
<td>1950/16.3</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust port. Volts: 110 • Cycle: 50/60Hz • Phase: Single

See page 19 for price information.
True vacuum valves.

Durable vacuum valves with seats are located on the top edge of the unit for convenient pump connection. Standard high temperature silicone gaskets ensure a non-leaking seal around the door. Ovens will maintain a vacuum up to 10 microns or better.

Model 1410M

Top accuracy.

The microprocessor controller results in precise temperature control. Digital setpoint and display facilitate the control of the temperature in 1°C increments.

The dual door design helps maintain optimum temperature uniformity. The inner door features a half-inch thick (¾" on Model 1450M) tempered glass observation window that resists breakage under vacuum and allows you to easily view your samples. These units also feature all stainless steel interiors and exteriors for corrosion resistance and easy cleaning.

Unique contact heating.

These vacuum ovens utilize a unique contact heating system. The walls of the chamber are lined with heating elements. As there is no air in the chamber, heat is transferred to the samples via aluminum shelves that are in contact with the walls of the chamber.

Convenient access port.

A one-inch port is located on the back of the vacuum oven chambers for easy connection of in-house pump systems and for external access with adapter. (Adapter not included).

Cross flow ventilation.

The vacuum inlet is located on the top front and the bleed back inlet is in the bottom back. This configuration forces your inert gas to travel the greatest distance, passing over your samples and purging the chamber.

Key features:

- True vacuum valves
- Unique cross flow ventilation
- Contact heating
- Microprocessor temperature controller
- Stainless steel interior and exterior
- Access port
- Independent overtemperature safety
- CSA approved
- 24 month warranty on parts and labor

VWR Signature Vacuum Ovens offer many unique features to ensure superior performance.

### VWR SIGNATURE VACUUM OVENS

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/ Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2201-515</td>
<td>1410M</td>
<td>0.6</td>
<td>Small, Digital, 3 Shelves, 120V/220V</td>
<td>40-325°C</td>
<td>±2.0°C @ 100°C, ±3.0°C @ 200°C</td>
<td>35 @ 100°C</td>
<td>Int. 9 x 12 x 9 Ext. 13 x 16 x 16</td>
<td>1410/8.3</td>
</tr>
<tr>
<td>S2201-516</td>
<td>1410M-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1100/4.6</td>
</tr>
<tr>
<td>S2201-548</td>
<td>1430M</td>
<td>1.7</td>
<td>Medium, Digital, 3 Shelves, 120V/220V</td>
<td>40-260°C</td>
<td>±2.0°C @ 100°C, ±3.0°C @ 200°C</td>
<td>35 @ 100°C</td>
<td>Int. 12 x 20 x 12 Ext. 25 x 25 x 21</td>
<td>1000/8.3</td>
</tr>
<tr>
<td>S2201-549</td>
<td>1430M-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1200/5.0</td>
</tr>
<tr>
<td>S2201-650</td>
<td>1450M</td>
<td>4.5</td>
<td>Large, Digital, 3 Shelves, 120V/220V</td>
<td>40-260°C</td>
<td>±2.5°C @ 100°C, ±3.5°C @ 200°C</td>
<td>70 @ 100°C</td>
<td>Int. 18 x 24 x 18 Ext. 30 x 29.5 x 24</td>
<td>1500/12.5</td>
</tr>
<tr>
<td>S2201-651</td>
<td>1450M-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1600/8.7</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust stack. • Cycle 50/60Hz • Phase Single

See page 19 for price information.
Versatile programmability.

The Watlow 981 temperature controller, programmable and microprocessor-based, offers multiple ramp and soak capabilities, including storing and running up to 24 temperature profiles. Controls are easily adjustable and the control panel is user friendly. A digital vacuum gauge shows chamber vacuum level in measurements of Torr and mTorr. The display range is 760 Torr down to 0 mil Torr. A secondary independent high limit controller provides overtemperature safety protection.

Solid construction.

The oven chamber, wrapped in high temperature insulation, aids overall performance and promotes energy efficiency. All stainless steel construction, true vacuum valves and cross-flow ventilation through the oven chamber enhance total performance. Vacuum oven is secured to a ruggedly constructed mobile stand to create a vacuum station. The stand is designed for mounting a vacuum pump at the base. Although the oven is not supplied with a vacuum pump, all vacuum plumbing and KF25 connections are provided. Stainless steel is used for all vacuum tubing and connections.

Key features:

- Large 9 cu. ft. capacity
- Microprocessor temperature controller
- Stainless steel interior and exterior
- Access port
- Independent overtemperature safety
- 24 month warranty on parts and labor

The nine cubic foot size of this VWR Signature Model 1495D general-purpose vacuum oven makes it ideal for research and industrial use. Common applications include drying heat sensitive samples, moisture determination and drying samples under a controlled atmosphere.

VWR Signature™ Model 1495D Vacuum Oven
Designed for a variety of applications

See page 19 for price information.
True vacuum valves.

Vacuum valves with seats are located on the top edge of the unit for convenient pump connection. Standard high temperature silicone gaskets ensure a non-leaking seal around the door. Ovens will maintain a vacuum up to 10 microns or better.

Durable design.

Temperature is controlled by a hydraulic thermostat and a feature stainless steel interior. A half-inch thick tempered glass observation window in the oven door permits easy viewing of the chamber interior.

Cross flow ventilation.

The vacuum inlet is located on the top front and the bleed back inlet is in the bottom back. This configuration forces your inert gas to travel the greatest distance, passing over your samples and purging the chamber.

Unique contact heating.

These vacuum ovens utilize a unique contact heating system. The walls of the chamber are lined with heating elements. As there is no air in the chamber, heat is transferred to the samples via aluminum shelves that are in contact with the walls of the chamber.

Convenient access port.

The Model 1430 has a one-inch port that is located on the back of the vacuum oven chamber for easy connection of in-house pump systems and for external access with adapter. (Adapter not included).

Key features:

- True vacuum valves
- Unique cross flow ventilation
- Contact heating
- Wrap around insulation for energy efficiency
- Analog temperature controller
- Stainless steel interior
- Access port (Model 1430)
- Independent overtemperature safety
- CSA approved
- 24 month warranty on parts and labor

See page 19 for price information.
Safety design.

Designed with the safety of your lab in mind, these vacuum ovens have additional safety features such as the non-positive door latch and safety screen. This door latch design releases pressure quickly, eliminating the possibility of an explosion. The .063 gauge steel mesh safety screen over the observation window protects lab occupants in the event the glass should shatter due to an explosion.

Quality features.

These models come standard with a microprocessor temperature controller, stainless steel interior and exterior and a dual door system. They also feature the true vacuum valves, cross flow ventilation and contact heating system.

Standard features.

The digital designs come standard with a stainless steel interior and exterior and a dual door system. They also feature the true vacuum valves, cross flow ventilation and contact heating system as well.

---

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Capacity, ft.³</th>
<th>Style</th>
<th>Temperature Range</th>
<th>Uniformity</th>
<th>Heat Up, Minutes</th>
<th>Dimensions*, W x D x H in.</th>
<th>Watts/Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>52201-481</td>
<td>1410MS</td>
<td>0.6</td>
<td>Small, 2 Shelves</td>
<td>40-325°C</td>
<td>± 2.0°C @ 100°C ± 3.0°C @ 200°C</td>
<td>35 @ 100°C</td>
<td>Int: 9 x 12 x 9 Ext: 19 x 16 x 16</td>
<td>1410/8.3</td>
</tr>
<tr>
<td>52201-551</td>
<td>1430MS</td>
<td>1.7</td>
<td>Medium, 2 Shelves</td>
<td>40-260°C</td>
<td>± 2.0°C @ 100°C ± 3.0°C @ 200°C</td>
<td>35 @ 100°C</td>
<td>Int: 12 x 20 x 12 Ext: 25 x 25 x 21</td>
<td>1000/8.3</td>
</tr>
<tr>
<td>52201-656</td>
<td>1450MS</td>
<td>4.5</td>
<td>Large, 2 Shelves</td>
<td>40-260°C</td>
<td>± 2.5°C @ 100°C ± 3.5°C @ 200°C</td>
<td>70 @ 100°C</td>
<td>Int: 18 x 24 x 18 Ext: 30 x 28.5 x 24</td>
<td>1500/12.5</td>
</tr>
<tr>
<td>52201-490</td>
<td>1410S</td>
<td>0.6</td>
<td>Small, 2 Shelves</td>
<td>40-225°C</td>
<td>± 3.5°C @ 100°C ± 5.0°C @ 200°C</td>
<td>30 @ 100°C</td>
<td>Int: 9 x 12 x 9 Ext: 19 x 16 x 16</td>
<td>550/4.6</td>
</tr>
<tr>
<td>52201-479</td>
<td>1430S</td>
<td>1.7</td>
<td>Medium, 2 Shelves</td>
<td>40-325°C</td>
<td>± 3.5°C @ 100°C ± 5.0°C @ 200°C</td>
<td>30 @ 100°C</td>
<td>Int: 12 x 20 x 12 Ext: 25 x 25 x 21</td>
<td>1100/9.2</td>
</tr>
</tbody>
</table>

*Exterior dimensions include handle and exhaust stack. • Volts: 120 • Cycle: 50/60 Hz • Phase: Single

See page 19 for price information.
## Price List

### Cat. No. | Model | Voltage | Price
--- | --- | --- | ---
1309-458 | VWR Signature Depyrogenation, p. 12 | 1365 | $4665.19

### Chart Recorder Bracket
52202-576 | _ | _ | $44.00

### Glass Viewing Doors
52201-153 | 1300GM/FF | _ | $368.00
52201-162 | 1350GF/FF | _ | 412.00
52201-173 | 1370GF/FF | _ | 385.00
52201-774 | _ | _ | 868.00
52201-785 | _ | _ | 494.00
52202-096 | _ | _ | 647.00
52202-223 | _ | _ | 605.00
52202-290 | _ | _ | 811.25
52202-562 | _ | 1690 | 853.00

### Replacement Thermometer
52201-592 | 1410, 1430 | _ | $40.00

### Replacement Filters
52201-741 | _ | 1365 | _ | $1801.80
52202-578 | _ | 1365 | _ | 37.50

### Silicone Gaskets (Red)
52201-606 | _ | 1400E, 1410, 1410M | _ | 68.00
52201-581 | _ | 1430, 1430M | _ | 82.00
35823-398 | _ | 1450M | _ | 105.00

### Hi-Temp Silicone Gasket (Grey)
52201-538 | _ | 1400E, 1410, 1410M | _ | 70.00
35912-020 | _ | 1430, 1430M | _ | 80.00
52201-684 | _ | 1450M | _ | 105.00

### Buna-N Gaskets (Black)
52201-628 | _ | 1400E, 1410, 1410M | _ | 82.00
52201-570 | _ | 1430, 1430M | _ | 82.00
52201-672 | _ | 1450M | _ | 77.00

### Viton-B Gaskets (Brown)
52201-617 | _ | 1400E, 1410, 1410M | _ | 150.00
52201-639 | _ | 1430, 1430M | _ | 165.00
52201-640 | _ | 1450M | _ | 215.00

### Shelves
52201-763 | _ | 1601 | _ | 76.90
52201-722 | _ | 1602, 1670 | _ | 82.00
52202-075 | _ | 1675 | _ | 82.00
52202-077 | _ | 1680 | _ | 82.00
14004-308 | _ | 1685 | _ | 82.00
52202-531 | _ | 1690 | _ | 82.00
35823-393 | _ | 1330 Series | _ | 46.00
52203-333 | _ | 1350 Series | _ | 46.00
52203-331 | _ | 1370 Series | _ | 46.00
52202-540 | _ | 1380FM | _ | 82.00
52202-540 | _ | 1390FM | _ | 82.00
52200-902 | _ | 1310, 1300U | _ | 46.00
52200-900 | _ | 1321, 1320, 1305U | _ | 46.00
14004-306 | _ | 1324, 1325F | _ | 46.00
14004-304 | _ | 1326, 1327F | _ | 46.00
52201-538 | _ | 1400E, 1410 Series | _ | 46.00
52201-561 | _ | 1430 Series | _ | 46.00
52201-662 | _ | 1450M | _ | 54.00

### Accessories

#### Floor Stands
52201-730 | _ | 1601, 1602, 1670 | _ | $1440.00
52201-755 | _ | 1602, 1670 | _ | 828.60

#### Power Exhaust, 110V
52202-344 | _ | 1330-1370 | _ | $390.00

#### Power Exhaust, 220V
52202-530 | _ | 1600 Series, 1380FM, 1390FM | _ | $390.00

### VWR Signature High Performance Clean Room, p. 11
52201-710 | _ | 1602 | _ | $8358.77
52201-721 | _ | 1601 | _ | 4787.41
To Order from Over 400,000 Products...

<table>
<thead>
<tr>
<th>Sales &amp; Inventory Locations</th>
<th>Call Direct for Specialized Service Locations</th>
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<tbody>
<tr>
<td><strong>Pacific Northwest</strong></td>
<td><strong>Northeast</strong></td>
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<tr>
<td>Anchorage, AK</td>
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<tr>
<td>San Francisco, CA</td>
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<td>Seattle, WA</td>
<td>Marlboro, MA</td>
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<td><strong>Southeast</strong></td>
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<td>Indianapolis, IN</td>
<td>Miami, FL</td>
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<td>Minneapolis, MN</td>
<td>Oak Ridge, TN</td>
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<tr>
<td>St. Louis, MO</td>
<td>Research Triangle Park, NC</td>
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<tr>
<td><strong>Gulf States</strong></td>
<td><strong>VWR Canlab</strong></td>
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<tr>
<td>Dallas, TX</td>
<td>Mississauga, Ontario</td>
</tr>
<tr>
<td>Houston, TX</td>
<td>Ville Mont-Royal, Québec</td>
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<tr>
<td>Lake Charles, LA</td>
<td>Edmonton, Alberta</td>
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<tr>
<td><strong>International</strong></td>
<td><strong>Puerto Rico</strong></td>
</tr>
<tr>
<td>3000 Hadley Rd.</td>
<td>Carr. #869, Km. 1.5 M-4</td>
</tr>
<tr>
<td>3rd Floor</td>
<td>Royal Industrial Park</td>
</tr>
<tr>
<td>So. Plainfield, NJ</td>
<td>Catano, PR 00962</td>
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<tr>
<td>908-757-4045</td>
<td>800-932-5000</td>
</tr>
<tr>
<td>fax: 908-757-0313</td>
<td>787-275-4500</td>
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<tr>
<td></td>
<td>fax: 787-788-4320</td>
</tr>
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<td><strong>Production Supplies and Services</strong></td>
<td><strong>Switzerland</strong></td>
</tr>
<tr>
<td>975 Overland Ct.</td>
<td>Ruchligstrasse 20</td>
</tr>
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<td>San Dimas, CA 91773</td>
<td>P.O. Box 964, CH-8953</td>
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<tr>
<td>877-VWR-PSCS</td>
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<td>(877-897-7727)</td>
<td>011-41-1-745-1155</td>
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<tr>
<td>fax: 888-890-9124</td>
<td>fax: 011-41-1-745-1150</td>
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<tr>
<td><strong>Furniture Division</strong></td>
<td><strong>VWR Direct</strong></td>
</tr>
<tr>
<td>P.O. Box 3405</td>
<td>911 Commerce Ct.</td>
</tr>
<tr>
<td>Irving, TX 75015</td>
<td>Buffalo Grove, IL 60089</td>
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<tr>
<td>888-624-2432</td>
<td>800-444-0880</td>
</tr>
<tr>
<td>fax: 972-753-1389</td>
<td>fax: 847-229-8465</td>
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<tr>
<td><strong>VWR Laboratory Distributors Services</strong></td>
<td><strong>Corporate Accounts</strong></td>
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<tr>
<td>911 Commerce Ct.</td>
<td>1310 Goshen Pkwy.</td>
</tr>
<tr>
<td>Buffalo Grove, IL 60089</td>
<td>West Chester, PA 19380</td>
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<tr>
<td>800-873-8971</td>
<td>610-431-1700</td>
</tr>
<tr>
<td>fax: 847-229-0668</td>
<td>fax: 610-431-9174</td>
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