

# 3M™ Steri-Vac™ Sterilizer/Aerator GS Series



3M™ Steri-Vac™ Sterilizer/Aerator GS Series is a 100% ethylene oxide sterilization system that is an effective and safe low temperature sterilization method for medical devices and other applications. The GS Series sterilizers, Models GS5 and GS8 are designed for use in health care, and Models GS5X and GS8X for use in life science, medical device, contract sterilization, R&D laboratory applications, and other research and industrial applications for terminal sterilization. The GS Series sterilizers provide control and independent monitoring with state-of-the-art, compliant mechanical design.

			Models GS5 and GS5X	Models GS8 and GS8X
<b>Dimensions and Weight</b>	Shipping Weight	Single Door	200 kg (440 lbs.)	478 kg (1,054 lbs.)
		Double Door	212 kg (468 lbs.)	484 kg (1,066 lbs.)
	Crate Dimensions H x W x D		96 x 99 x 114 cm (37.75 x 38.625 x 44.875 in.)	202 x 117 x 145 cm (79.25 x 45.75 x 57.125 in.)
	Operational Weight	Single Door	127 kg (281 lbs.)	261 kg (576 lbs.)
		Double Door	132 kg (290 lbs.)	269 kg (593 lbs.)
Exterior Dimensions H x W x D		96.0 x 98.0 x 114.1 cm (27.9 x 30.0 x 37.4 in.)	179.8 x 94.0 x 109.0 cm (70.8 x 37.0 x 42.9 in.)	
<b>Sterilization Chamber</b>	Volume		136 L (4.8 ft. <sup>3</sup> )	224 L (7.9 ft. <sup>3</sup> )
	Dimensions H x W x D		38.0 x 43.0 x 83.0 cm (15.0 x 17.0 x 32.5 in.)	46.0 x 51.0 x 97.0 cm (18.0 x 20.0 x 38.0 in.)
	Load Basket Dimensions H x W x D	Lower Basket	18.0 x 39.0 x 80.0 cm (7.0 x 15.5 x 31.5 in.)	20.0 x 45.7 x 94.0 cm (8.0 x 18.0 x 37.0 in.)
		Full-Depth Upper Basket*	18.0 x 39.0 x 80.0 cm (7.0 x 15.5 x 31.5 in.)	20.0 x 45.7 x 94.0 cm (8.0 x 18.0 x 37.0 in.)
Half-Depth Upper Basket		N/A	20.0 x 47.0 x 47.0 cm (8.0 x 18.5 x 18.5 in.)	
<b>Sound</b>	Sound Levels		The average decibel level of an active sterilizer is <60 dBA**	
<b>Electrical Power</b>	Line Voltage		200–240 VAC	
	Line Frequency		50/60 Hz	
	Phase		Single	
	Line Current		15 amp dedicated circuit	
	Heat Load	5,500 Btu/hr	6,150 Btu/hr	
	Current Load	10 amp	12 amp	
<b>Environmental Operating Conditions</b>	Altitude		2,500 M (maximum)	
	Operating Temperature		15–35°C (59–95°F)	
	Humidity		20–80% relative humidity (non-condensing)	
	Room Air Exchanges		10 per hour (minimum)	
	Minimum Room Size		30 m <sup>3</sup> (1,000 ft. <sup>3</sup> )	
<b>Compressed Air Specifications</b>	Pressure		7.0 kg/cm <sup>2</sup> (100 psig) minimum to 10.5 kg/cm <sup>2</sup> (150 psig) maximum	
	Flow Rate		2.2 liters per second at 7.0 kg/cm <sup>2</sup> (4.7 cubic feet per minute at 100 psig) per sterilizer, 100% duty cycle compressor	
	Quality		Clean air supply with a maximum allowable dirt particle size of 0.5 microns and free of oil	
	Moisture Content		Less than 10°C (50°F) dew point	
<b>Required Service Access</b>	Minimum Distance from Rear Wall		10.2 cm (4 in.)***	
	Minimum Access on Both Sides and Top		51 cm (20 in.)	
	Service Footprint H x W x D		122 x 177.8 x 146 cm (47.9 x 70.0 x 57.4 in.)	231 x 196 x 160 cm (40.8 x 77.0 x 62.9 in.)
<b>Ethylene Oxide Storage Requirements</b>	Cabinet		Approved flammable liquid storage cabinet	
	Venting		Vented to outside or to a non-recirculating, continuously operating, dedicated exhaust system, 10 air exchanges per hour required in cabinet	
	Size		Volume to hold two months' supply	

\*Full upper basket (as opposed to 2 half baskets) are available to GS8 or GS8X customers as a separately-purchased accessory item.  
\*\*Contact 3M for more information.

\*\*\*If the sterilizer is able to be moved for servicing, otherwise 51 cm (20 in.) is required.

Additional site planning information is available in the 3M™ Steri-Vac™ Sterilizer/Aerator GS Series Site Planning & Installation Guide.

# Specifications

## 3M™ EO Abator



The 3M™ EO Abator is a highly effective device used to catalytically convert 100% ethylene oxide gas exhausted from the 3M™ Steri-Vac™ Sterilizer/Aerators GS and GSX Series to CO<sub>2</sub> and water vapor. At normal operating conditions, removal efficiency is 99.9+% (when EO is >100 ppm), virtually eliminating emissions to meet environmental requirements. The 3M EO Abator is designed exclusively for use with 3M™ Steri-Vac™ Sterilizer/Aerators GS and GSX Series.

### 3M™ EO Abator

#### Physical Dimensions

Height	800 mm (31.5 in.)
Width	900 mm (36 in.)
Depth	1050 mm (41.5 in.)
Weight	Operating: 155.6 kg (343 lbs.) Shipping: 245.8 kg (542 lbs.)
Shipping Crate Dimensions	Abator (H x W x D): 97 x 102 x 122 cm (38 x 40 x 48 in.)
Sound Levels	<85 dBA

#### Electrical Power Requirements

Line Frequency	50–60 Hz	
Installation/Over Voltage Category	Category II	
Distance from Earth Ground to Abator	<40 m (130 ft.)	
<b>Model</b>	<b>Line Voltage</b>	<b>Line Current</b>
Model 50 AN (US/Canada)	220–240V Single Phase Volts AC	30 Amps
Model 50AE (Europe)	400V (±10%), Three Phase Volts AC	17 Amps
Model 50AJ (Japan)	200V (±10%), Three Phase Volts AC	28 Amps

#### Required Environmental Operating Conditions

Altitude	≤ 2500 meters
Relative Humidity	20–80 % (non-condensing)
Operating Temperature	1–40°C (34–104°F)
Exhaust Temperature	Idle (Ready): 138°C (280°F) Normal: 238°C (460°F) Maximum: 260°C (500°F)

#### Abator Operating Parameters

Pollution Degree	2
Heat Source	6 kW Electric Duct Heater
Maximum Air Flow	1.4 NCMM (50 SCFM)
Maximum EO Feed Rate	7.7 g/min (0.017 lbs/min)

#### Required Service Access

Service Footprint (H x W x D)	171.45 x 193.04 x 166.37 cm (67.5 x 76.0 x 65.5 in.)
Top/Above Unit	900 mm (36 in.)
Left and Right Sides	500 mm (20 in.)
Front Side	500 mm (20 in.)
Back Side	100 mm (4 in.)

#### Requirements for Length and Diameter of Vent Line for EO Inlet

Number of Sterilizers connected to Abator	Length <31 m (100 ft.)	31 m (100 ft.) ≤ length, 61 m (200 ft.)	31 m (100 ft.) ≤ length <61 m (200 ft.)
	1	2.5 cm (1.0 in.)	
2*	2.5 cm (1.0 in.)	3.8 cm (1.5 in.)	3.8 cm (1.5 in.)

\*Note: The XL Series sterilizer **cannot** be combined with a GS/GSX Series sterilizer when connecting two sterilizers to one abator.



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For more information, U.S. customers contact the  
**3M Health Care Service Group Helpline: 1-800-292-6298.**

Outside of the U.S., contact your local 3M office. See 3M.com for office locations.

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