# Optigel™ Horizontal Laminar Flow Cabinet

# Why choose OPTIGEL?

The OPTIGEL provides an ideal solution for multiple products that require protection from contaminations existing in the air.

The OPTIGEL laminar airflow prevents cross contamination.

The new design provides maximum user space and comfort.

Its horizontal flow of air enables fitting of extra shelves inside the cabinet without obstructing the flow.

The General Electric ECM fan with a DC motor is economical, energy efficient and very quiet.

The cabinet is equipped with a gel sealant system that enables faster and safer changing of the main filter.

The CPT digital panel provides full data and control over the cabinet features.

The cabinet's work surface is made from polished stainless steel.



The new OPTIGEL provides a clean air working area of Class ISO-5, according to ISO-14644. Air constantly flows horizontally through an absolute HEPA filter into the working area, thus protecting the product inside the cabinet from existing particles in the air.

The air flows evenly across the filter's surface, thus preventing air turbulence that can cause cross contamination. The new OPTIGEL is designed for long term use, works quietly, and is energy efficient.

# **Sectors Of Use**

- Optics
- Botanic
- Food industry
- Pharmaceuticals
- Research Centers

- Health & Hospital
- Defense& Aviation
- Chemistry
- Microelectronics
- Micro-mechanics



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The OPTIGEL is easy to clean. The unit's body is a monoblock made of heated painted metal, with 8mm safety glass walls and 316 L stainless steel working surface.

An additional component is a horizontal fan filter unit equipped with an Aluminum framed HEPA filter, efficiency H-14 (99.995% for particles 0.3m) to reach cleanliness level of ISO-5 (Class 100).

CONTROLED AIR CLASS – ISO 14644

CLEANLINESS LEVEL - ISO-5 / ISO-4

PRE-FILTER STANDARD – EN 779

HEPA FILTER STANDARD FN 1822

#### **Control Panel**

The CPT control panel has a digital display that shows air velocity, inside pressure and fan working condition. The CPT control has an alarm that switches on automatically when there is a pressure drop, or the main filter is clogged. It switches On/Off the cabinet's fan, light and the stand-by feature.

#### **Fan Systems Technically**

The ECM fan is technically designed to compensate automatically for filter clogging. It's quieter and more efficient than most standard fans, while consuming 30-40% less electricity.

#### Lighting

Two fluorescent light bulbs installed at the top of the chamber, provide 400-600 Lux on the working area.

#### **The Filters**

The OPTIGEL has 3 separate filters: 2 pre-filters W type size 12x20x2 inch, with a gravimetric efficiency of 90% G-3. 1 mini-pleat HEPA filter, size 610x1200x68 cm, efficiency H-14 (99.995% of particals 0.3 micron) according to European Norm EN-1822.

#### **Sterility**

The OPTIGEL work area is clean to a level of ISO-5. For extra sterility after utilization, a germicidal ultraviolet lamp of 254 nm can be fitted above the work surface. Since a UV light destroys germs, it should only be operated when there are no people inside the room therefore an automatic On/Off timer is installed with it.

Equipments	Optigel 12		Optigel 18	
Dimensions	External	Internal	External	Internal
Height	800 mm	620 mm	800 mm	620 mm
Width	1,243 mm	1,212 mm	1,875 mm	1,815 mm
Depth	850 mm	540 mm	850 mm	540 mm
Weight	100 kg		150 kg	
Height on stand	1,740 mm		1,740 mm	

## **Maintenance:**

No special maintenance is needed, except for changing the HEPA filter, and the Prefilters.

## **Electricity Requirements**

Mono-phase 220 V-50Hz, 10A, Nominal Power: 150 W

#### **Additional Options**

- Metal stand
- Middle Shelves
- Gas / Vacuum taps
- UV Light 254nm
- ULPA filter U-15, for ISO-4
- PTFE filter media (low Boron) for Microelectronics
- FMS Prob Facility Monitoring System

#### **The optional FMS Prob**

The FMS probe is a particle counter that provides continuous monitoring of airborne particles inside the OPTIGEL. The FMS is designed to meet the most stringent standard of laminar flow testing. This probe can be integrated with any FMS system to enhance monitoring accuracy.

