



SENTINEL 1000

EXCEPTIONAL FILTRATION AND
BIOSAFETY FOR LARGE SPACES

PRODUCTS:

SENTINEL 1000 UK : SENTINEL 1000 EU


Managing Biosafety

SENTINEL 1000

BUILT FOR LARGER SPACES



MAINTAIN BEST PRACTICE THROUGHOUT THE FOOD CHAIN

REDUCE BACTERIA AND IMPROVE FOOD SAFETY

In order to be a top performing food supplier it is essential to maintain low levels of bacteria throughout the working environment. Traditional cleaning and disinfection cannot reach and kill bacteria effectively, areas such as chillers and busy production present greater challenges for cross contamination. Bacteria and virus can be highly transmissible and they present a constant challenge*, some cleaning does more to spread contamination than control it.

HOW THE SENTINEL ACHIEVES RESULTS

Air passes through a HEPA filter removing 99% of particles before entering the UVC reaction chamber which destroys the remaining airborne microbes with high intensity UV light rays targeted on a reactive oxidising nano technology metallic compound, the high power UVC and reactive oxidising technology safely allows the control of Bacteria and Virus at a higher rate than ever before.

HEPA 14 is the filter commonly used in environments that are particularly sensitive to airborne particles, e.g. healthcare environments and laboratories.

All HEPA 14 filters are tested individually and have at least **99.995% filtration efficiency for 0.1-0.2 µm particles** in a single pass.

The influenza B virus is estimated to be about 0.12 µm and the new coronavirus at most, 0.16 µm. They may for some time be encapsulated in the droplets (about 10 µm) that spread in the air when we cough and sneeze as well as in the aerosols (about 1 µm) in our exhaled air. A single breath can contain anywhere from 1,000 up to 50,000 microdroplets.

After passing through the HEPA filter any remaining bacteria and virus are subject to extreme UVC dose immediately followed by photo catalytic oxidation (PCO) when passing the specialist TiO2 catalytic honeycomb.



Air changes	1 pass	2 pass	3 passes	4 passes
example	Production	High risk	Very High risk	Medical / laboratory
Area cover-	1000m3	500m3	333m3	250m3

*Certain bacteria such as E.coli can replicate every 20 minutes, which could in theory leave you with 16.7 million in 8 hours, what we are highlighting is that bacteria breed very quickly and cannot be controlled with traditional methods.

SENTINEL 1000



THE MOST ADVANCED BACTERIA CONTROL TECHNOLOGY OF ITS KIND, USED BY THE BEST PROFESSIONALS IN THE BUSINESS

SERVICING AND MAINTENANCE

A bright blue LED indicator bar changes to amber at 11 months to warn of an upcoming annual service, after 12 months the indicator changes to flashing red.

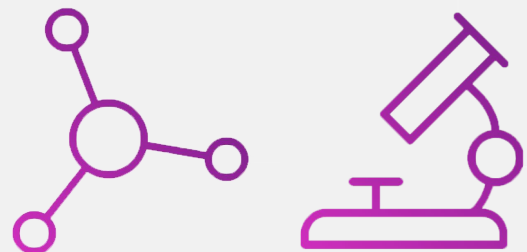
Sentinel units require a lamp change and HEPA filter to maintain performance. Subject to individual site conditions servicing would usually be carried out on an annual or bi-annual basis. Each unit uses 4 x specialist shatterproof UV lamps

Lamps must be replaced with the exact same output lamp to maintain performance.

Installation

All SENTINEL units are delivered ready to operate

- Simple wall fixing
- Stand off design aids cleaning
- Standard UK or EU plugs
- Resettable service timer



ENHANCED BIOSAFETY

Unit Dimensions	Construction
1400mm (L) x 430mm (W) x 385 mm (D)	Stainless steel, GLASS SAFE
Power Supply	Weight
220-230v 50Hz 0.53kW	44kg
Set up	Operation
Wall mounted. Four fixing points. UK or UK plug	2 high output ballasts, 4 x 75W specialist UV lamps Fan with 1000m ³ hr free air flow

Combined Technology Unique to UV safe



OPERATION AND SAFETY

The unique balance to technology used by UV Safe has been tried, tested and refined over many years to ensure the best achievable results with every unit supplied.

- > Due to the unit design UV light cannot escape the unit from any angle meaning it is completely safe.
- > Ozone levels are zero
- > The fan is shielded behind a protective end cap to avoid potential injury
- > Power via a standard UK or EU plug connector allows installation without loose cables and easy connection to existing sockets

HOW SENTINEL WORKS

Internal

- > **H14 HEPA filtration**—filters are tested individually and have at least 99.995% filtration efficiency for 0.1–0.2 μm particles in a single pass.
- > **Germicidal irradiation** by UV light (Ultraviolet) kills microorganisms (bacteria, viruses and mould) by disrupting their DNA and removing their reproductive capabilities.
- > **PCO - Photocatalytic Oxidation**, UV reacts with our catalyst (TiO_2) to form highly reactive but short lived oxidising Hydroxyl Radicals (OH) which break down Volatile Organic Compounds (VOCs).

Transmitted Technology

- > Negatively charged **Superoxide Ions** charge airborne contaminants causing them to cluster together and fall from the air as they become too heavy, aiding all other processes. This can cluster airborne particulates down to 0.0001 micron, enhancing HEPA filter capture.

FOR MORE INFORMATION OR TO BOOK AN AIR QUALITY CHECK CALL:

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