AirKlean UVGI
Ultraviolet Germicidal Irradiation

plasma-cleanair
AIR, ODOUR & GREASE CONTROL

The **AirKlean** UVGI is a "plug and play" unit, specifically designed to disinfect air in confined spaces, such as Hospital Rooms and Wards, Operating Theatres, Lifts and Lobbies, Waiting Rooms, Public Spaces, through to Retail Units and Food Production and Storage; anywhere that requires infection control.

With dimensions measuring in at a compact 192 x 228 x 740 (HWLmm)*, the AirKlean UVGI features both ceiling and wall mounting options (air is drawn through the unit via its internal fan).

The unit features **2x 95W UVC germicidal lamps** which emit light at a **wavelength** of 254nm. These high intensity UVC lamps eliminate over 99% of airborne microbes such as **viruses, bacteria, spores** and **mould**.

The AirKlean UVGI is finished in grade 304 stainless steel, weighing in at just 7kg.

Safety

The unit does not produce ozone, and has light guards to prevent UVC light escaping. As a result, the AirKlean UVGI can be used in places where people are present. For an extra safety precaution, the UVC emitters can be supplied with a special Teflon sheath** to protect against breakage.

**Optional extra

Benefits

- Disinfects 24 hours a day
- Plug and play (practically maintenance-free)
- Eliminates expensive and polluting chemical cleaners
- Excellent price / benefit ratio
- Simple to retrofit

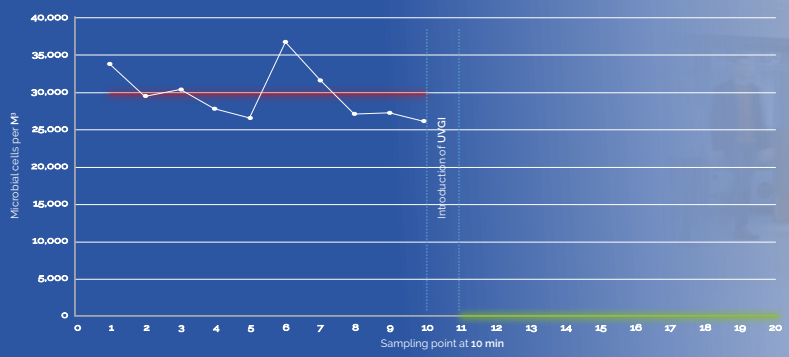
PRODUCT SPECIFICATION

Dimensions (HxWxL)	192 x 228 x 740mm
Weight	7kg
Supply	230v / 50Hz
Power consumption	240W
UVC emitter	2 x 95W with optional Teflon coating
UVC emitter life	9,000hrs
Material	Grade 304 stainless steel
Air flow	120m³/hr

*Plasma Clean Air is continuously improving its products and services and reserves the right to alter designs without prior notice

99+% DISINFECTION RATE

UVC light at 254nm is known as 'germicidal irradiation' due to its lethal effect on micro-organisms. Independent testing conducted at the University of Leeds, showed a reduction of over **99% of viruses**, **bacteria**, **spores** and **fungi** when exposed to our UVGI products. Tests were conducted using a range of biological indicators designed for the pharmaceutical, food and medical device industries.



Read the full findings via Plasma-Clean.com/news

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CIBSE CPD FEA Foodservice Equipment Association Information Involvement Influence BESA BUILDING ENGINEERING SERVICES ASSOCIATION

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Introduction to UVGI • Ultraviolet Germicidal Irradiation

Ultraviolet light in the c-band range (225–302 nm) is lethal to micro-organisms and is referred to as ultraviolet germicidal irradiation (UVGI). UVGI works by cross linking nucleic acids (DNA & RNA) to prevent replication and proliferation of micro-organisms such as viruses, bacteria, spores, moulds, yeast and fungi. It is important to use the correct UVC dosage in order to achieve high kill rates. Low intensity UV-C can be used for surface treatment as there is a long UV-C exposure time whereas high intensity UVC is required for air treatment as the exposure time is short. Plasma Clean Air UVGI systems are sized to achieve up to 99% microbial kill rate for common microbes based on UV-C dosage tables in the scientific literature as well as independent testing carried out by Plasma Clean Air.

Plasma Clean Air's germicidal range consists of the CoilKlean UVGI for surface treatment of heat exchange coils, the AirKlean UVGI unit which is a standalone air cleaner and the TechniKlean UVGI designed to treat air in building ventilation systems.

Air Treatment using AirKlean UVGI

The AirKlean UVGI is designed to disinfect air in enclosed spaces – from offices and public buildings to cold stores and food production areas, in fact anywhere that requires infection and odour control.

Sizing of Equipment – AirKlean UVGI

One Airklean UVGI unit has a coverage of up to 100m².
To accurately specify the correct equipment to ensure optimum germicidal performance, the following information is required:

- Height x Width x Length of the room where the UVGI equipment is to be installed
- Room layout to assess air circulation
- Room air changes per hour
- Type of micro-organism that is being treated.

Installation

The unit is ceiling or wall mounted and has an internal fan which draws air through the unit. Here, the air passes over high intensity UVC emitters which act on airborne microbes such as viruses, bacteria, spores, mould, yeast and fungi. For best results, locate the unit where there is free-flowing air circulation. The standard unit does not produce ozone, and has light guards to prevent UVC light escaping. As a result, the AirKlean UVGI can be used in places where people are present. Ozonating models are available on request, please enquire. For surge protection purposes it is recommended to install a Class D MCB circuit breaker in the electrical supply.

Kit Contents

AirKlean UVGI unit complete with UVC emitters (installation required)
Mains power cable – 2m
Screws and fixings for mounting are not supplied.

Accessories

Teflon coated lamps for food safety applications, please enquire.
Ozonating lamps.

Safety

For UVC safety, the unit has internal UVC light guards to prevent UV light escaping.

Maintenance

A Plasma Clean Air service contract is available (please enquire) and in any case Plasma Clean Air would recommend:

- Servicing is normally confined to the regular cleaning of the UVC lamps as part of a maintenance programme managed by Plasma Clean Air or a Plasma Clean Air approved contractor
- For maximum efficiency establish a regular cleaning cycle based on routine checks of the UVC lamps during the first few months of use.
- The UVC lamps have a normal operating life of 9,000 hrs after which time they should be replaced

Technical Drawing

Please contact our Technical Helpdesk if a CAD drawing is required.

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