# REACT-AIR INDUCT

# Above Ceiling Air Sterilisation System





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Poundbury House | Poundbury West Industrial Estate | Dorchester | Dorset | DT1 2PG

# **React-Air Induct**

# Reaction Group

#### **Above Ceiling Air Sterilisation System**

Our unique Induct system combines powerful pathogenneutralising UV-C germicidal technology with measurement data and tools that ensure the air you breathe is protected from bacteria and virus risk.

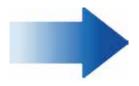
The React-Air Induct system uses Pure Germicidal Light, HEPA 13 Filters and includes eight 25W High-Intensity Pure Fused Quartz UVC Germicidal Lamps.

These allow air to flow through them, destroying biological contaminants, preventing them from growing again and spreading.



#### What is UV-C?

The Technology Explained



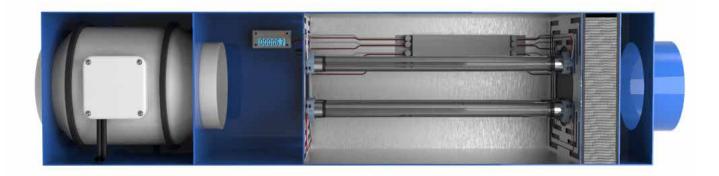
### What is UVC?



How does the React-Air Induct neutralise viruses in the air?

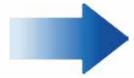
UVC light is highly effective at decontamination because it destroys the molecular bonds that hold together the DNA of viruses and bacteria. UVC light has been regularly used to decontaminate surgical tools and hospital rooms. The Induct draws air into its extraction vents which are specifically located at shoulder height, so as to capture as many virus particles as possible.

The air then passes through a medical-grade HEPA 13 filter, trapping any larger contaminants, and finally through a high intensity UVC chamber, capable of delivering a dose of over 240J/M2 - enough to neutralise even the most resilient coronaviruses studied. The high power, variable fan can circulate up to **550** metres cubed of air per hour - enough to give 9 air cycles per hour in an average 50 person office space.



### **Design and Installation**

For Optimal Results



## **Design and Installation**



Bespoke Design for Optimal Results

The React-Air Induct system is installed above your ceiling so that it blends in with your workplace aesthetics. Our installation team designs the correct placement of the Induct units.

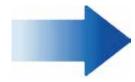
Our qualified electrical team undertakes installation to British Standards which ensures that the Induct system always functions correctly.

The monitoring technology inside each Induct is linked wirelessly to the cloud allowing for data to be viewed either on our React-Air phone app for Android or iOS, and our online web portal allows facilities managers to view multiple site data in real-time, and receive alerts if any dangers are detected.



### **Advanced Monitoring**

Peace of Mind for Staff and Users



# **Advanced Monitoring**

Peace of Mind for Your Staff and Building Users

The React-Air Induct is the only UV germicidal in-line unit that simultaneously monitors lamp brightness, air-flow and air quality and then feeds this information directly back to a base station, so the performance of the system can be monitored from either our 'React-Air' mobile app or our online web-based platform for both individual and multiple sites.

This functionality ensures optimal performance combined with real-time information to keep your buildings safe.

The React-Air monitoring system uses state-of-the-art measurement contained within the Induct device. Measurements are taken every 10 seconds to ascertain:

Lamp Function and Brightness.

Air Quality.

Air Flow and Air Exchange Rates.

### **Destroyer Array**

The 3 Stage Process for Eliminating Covid-19











## **Destroyer Array**

The 3 Stage Process for Eliminating Covid-19



#### 1. HEPA 14 Filtration

Using the React-Air's high-pressure fan, air is passed through a HEPA 14 filter to remove 80% of particles 0.3-1 microns. This process removes pollens, bacteria and viruses bonded to larger particles such as water droplets (the primary way Covid-19 spreads through airborne transmission).

#### 2. Powerful UVC Array

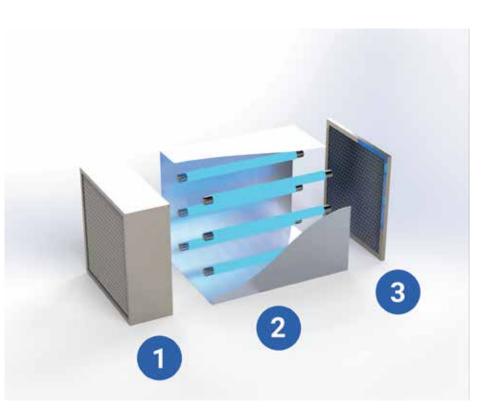
The filtered air is then passed through a UVC array, which delivers a dose of 250J/M3 – enough to neutralise Covid-19 (67J/M3 for one second of exposure according to studies). The effect of the UVC Array is intensified by its polished aluminium interior. UVC renders virus particles inert (sterile) by changing the molecular structure of the virus DNA.

#### 3. Activated Carbon Filter

Finally, the air is passed through an activated carbon filter to remove any remaining odours. As well as removing any natural odours in the environment, the reaction between UVC and dust particles creates a mild, but for many people, unpleasant smell—all are removed with Activated Carbon.

### **Technical Specifications**





# **Technical Specifications**



#### React-Air Induct

Supply Voltage	230V A/C
Minimum Power Consumption	180 W
Maximum Power Consumption	200W
Average Power Consumption	190 W
Average Air Flow	550 M3 Per Hour
Dimensions (W / D / H)	120 cm x 45 cm x 40 cm
Weight	17 <b>K</b> g
Noise Level	32 db
Dominant Wavelength	253.7 nm
Radiated Power (UVC) Per Lamp	6.9W (55.2W Total)
Total BC Flux	47.47 W
Volume Bacterial Dose at Average	264.2 J/M2
Lamp Lifetime (Average)	6000 - 9000 hours
HEPA 13 Filter Lifetime (Average)	12 Months





For more information call 0203 885 2299



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