



Krantz VIRUSPROTECT

Krantz

Krantz have been innovating and delivering high-performance air filtration and distribution solutions for over 50 years within the most demanding and hazardous applications where safety is critical, such as Nuclear Installations, High-Security Laboratories, Cleanrooms and Hospital Isolation Wards.

Our products enjoy an excellent reputation, worldwide, and are used where Quality and Reliability are paramount, in both public and commercial buildings.

Our state-of-the-art technology enables us to fulfill the highest requirements for air distribution systems and meet the strictest air pollution control standards.

We are now able to bring this wealth of specialist experience to meet the current global challenge of Coronavirus, enabling the maximum possible protection to the public and staff within shared indoor spaces - helping businesses regain customer confidence.

.... introducing

 **VIRUSPROTECT**

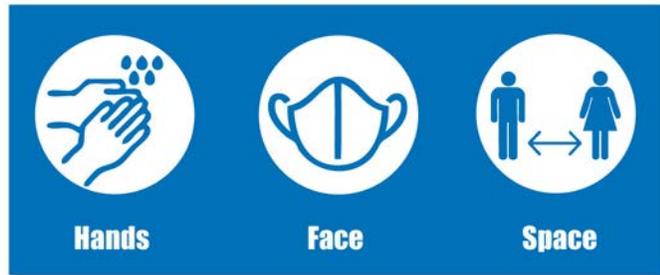


Krantz VIRUSPROTECT

The mobile aerosol filter

Krantz

Developed in our state-of-the-art R&D Facility in Aachen, Germany, **Krantz VIRUSPROTECT** uses mobile aerosol filters to great effect by removing Coronaviruses and other airborne contaminants from indoor air. Developed specifically for flexible use and rigorously tested under sound scientific principles, **Krantz VIRUSPROTECT** perfectly complements established individual Coronavirus precautions with efficient, cutting-edge technology.



+ **Krantz VIRUSPROTECT**

is *the* Anti-Coronavirus Formula for the winter season.

Application Areas:

- Lounge and Waiting Areas
- Clinics and Medical Practices
- Open-plan Offices, Meeting Rooms
- Shops, Bars and Restaurants
- Public Institutions and Authorities
- Classrooms, Schools, Universities



Safe Coronavirus Protection with Krantz VIRUSPROTECT

The H14 HEPA filters of the **Krantz VIRUSPROTECT** remove microorganisms and viruses from room air, to a degree of purification >99.995%. The patented, inactivating coating also ensures that >99.95% of viruses and micro-organisms are inactivated automatically. SARS-CoV2 virus particles are reliably captured, as are seasonal flu viruses and many other viruses, bacteria, spores, allergens, and germs.



Maximised Clean Air Zone : Optimised Air Flow

The **Krantz VIRUSPROTECT** incorporates high performance air outlets to maximise the clean air zone. The fourteen jet nozzles of the multiplex outlet on the front of the device are individually adjustable and when combined with the additional swirl outlet on the top of the unit, create a widely discharged, turbulent clean-air path. This minimizes the particle load in the occupied area, pushing the particles close to the floor and feeding them continuously to the air inlet on the underside of the **Krantz VIRUSPROTECT** unit.

Krantz VIRUSPROTECT- Easy Handling for Daily Operation

The construction and surfaces of the **Krantz VIRUSPROTECT** are designed for robust everyday use and to strict medical standards. An integrated, adjustable, CO₂ sensor is also included. The specially-coated H14 HEPA filter elements are long-lasting, and easily replaced without any additional protective measures or trained staff. The spent filters can be disposed of in the standard waste stream.



Advantages

- **Universal, mobile** 3-stage device for rooms up to 90m² and/or 30 people
Volume flow **Stage 1:** 250m³/h, **Stage 2:** 500m³/h, **Stage 3:** 750m³/h
- Safe, verifiable and passive inactivation of viral load **>99.9%***
- Air inlet chamber incl. Inlet grille, pre-filter, inner acoustic lining and H14 HEPA filter equipped with patented **inactivation coating**
- The uncontrollable multiplication of any micro-organisms, viruses and potentially harmful substances is **prevented**
- The coating is designed for daily use for **~12 months**
- 100% **ozone-free**, no use of UV-C light or thermal heat sources
- Collection and recirculation of all room air for the **greatest possible safety**
- Integrated **CO₂ sensor** with adjustable threshold value (eg. 1,000ppm)
- High comfort, low noise level **<45dB/A** designed for continuous operation
- **Contamination-free**, safe maintenance of devices
- Smooth, elegant, and high-quality design made of rustproof, disinfection-ready **stainless steel**
- Connected load 230V, **<0.3 KW**, energy consumption <50€/ year
- **Intuitive**, plug & play operation
- In addition to the filtering of viruses, **microorganisms** such as bacteria, fungal spores, allergens, hospital germs, etc. are captured and inactivated in one step.



**Available
December 2020**

- **Dimension:** 680mm / 1,830mm / 700mm W/H/D
- **Weight:** approx. 140kg
- **Power supply:** 230V / 50Hz
- **Power consumption:** <0.3KW, < 2A
- **Volume flow:**
 - Stage 1: 250m³/h for rooms up to 30m² and/or 10 people
 - Stage 2: 500m³/h for rooms up to 60m² and/or 20 people
 - Stage 3: 750m³/h for rooms up to 90m² and/or 30 people
- **Pre-Filter stage:** Coated* filter element ISO ePM10 50% acc. EN ISO 16890
- **HEPA Filter stage:** Coated* HEPA filter element H14 acc. DIN EN 1822
- **Lining:** Coated* sound adsorbing lining
- **Fan:** EC-radial fan with constant volume flow controller
- **Active Carbon Filter stage:** Polyurethan-Ester foam with impregnated active carbon
- **Front Air Outlet:** Adjustable Krantz Broad Multiplex Outlet type BF-V
- **Top Cover Air Outlet:** Krantz Twist Outlet DD-N
- **CO₂ Sensor:** Integrated, preadjusted value 1,000ppm
- **Control unit:** Siemens, incl. panel and text display for operating and fault messages
- **Delivery conditions:** Mobile on wheels, ready to plug in (plug & play)



* Patented coating to inactivate (> 99.95%) viruses, microorganisms and pollen

Krantz VIRUSPROTECT

Assumption; Workdays operation 7:00am until 5:00pm		
Energy consumption /10h	0.64	KWh
Consideration of the annual disc (5 days, week 10 hours / day)		
52 weeks x 5 days x energy consumption x energy costs 28ct / KWh		
Energy cost / year	46,67	€/ y



Competitor with heater / thermal unit for virus inactivation

Assumption; Workdays operation 7:00am until 5:00pm		
Heating capacity	2000	W
7:00-9:00am Filtration mode	0.13	kWh
9:00-10:00am Heating	2.00	kWh
10:00-12:00am Filtration mode	0.13	kWh
12:00-1:00pm Heating	2.00	kWh
1:00-2:00pm Filtration mode	0.13	kWh
2:00-3:00pm Heating	2.00	kWh
3:00-5:00pm Filtration mode	0.13	kWh
17:00-18:00 Heating	2.00	kWh
Energy consumption /10h	8.52	KWh
Consideration of the annual disc (5 days, week 10 hours / day)		
52 weeks x 5 days x energy consumption x energy costs 28ct / KWh		
Energy cost / year	620,26	€/ y



CONCLUSION:

Products with a thermal unit require approx. 13x more energy and cannot filter room air during the inactivation time (up to 40% of the operating time!).

Price list Krantz VIRUSPROTECT

1 -5 Units	6-10 Units	11 - 20 Units	21 - 50 Units	Ab 51 Units
4.296,00 €/pc.	4.196,00 €/pc.	4.069,00 €/pc.	3.949,00 €/pc.	3.836,00 €/pc.

- All prices net, ex works Mellersdorf, Germany

Delivery times: 2-4 weeks after receipt of order*

*depends on quantity and availability

Price list spare parts

Set 1: Pre-filter + coated inlay: 150,00€/ Stk.

Set 2: H14 HEPA filter: 395,00€/ Stk.

Set 3: Active carbon element: 100,00€/ Stk.

All prices net, ex works Mellersdorf, Germany



Krantz, market leader in filter technology for high safety laboratories and air handling systems.

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