



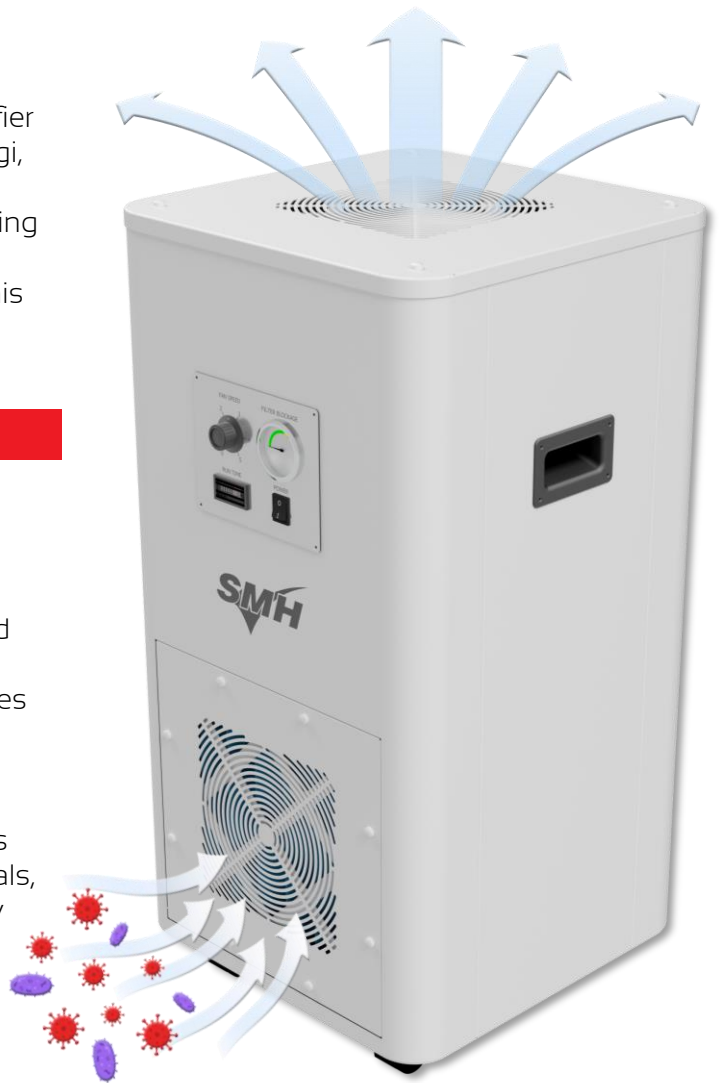
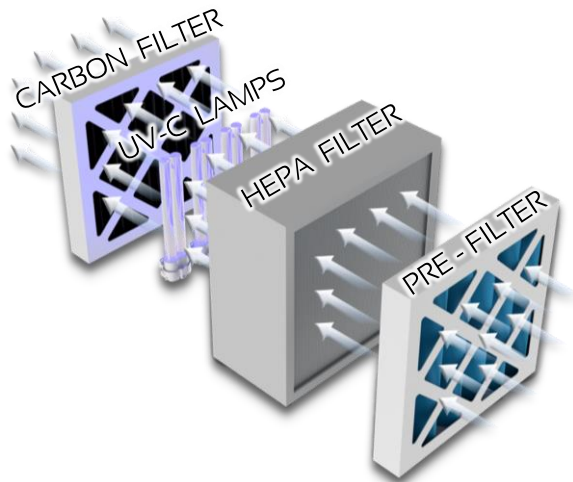
APU 500

Clean Air Purification Units

The APU 500 is a commercial-grade air purifier which reduces airborne bacteria, viruses, fungi, and other pathogens, while also removing smoke, dust, and pollen particles. By combining UV-C technology and high-efficiency particulate air (HEPA) filtration technology, this free-standing unit can be used in any indoor location to improve air quality.

Combined air purification

- Four-stage filtration
- Pre-filter for removing larger particles
- H14-class HEPA filter for removing finer particles
- UV-C filtration for inactivating bacteria and viruses
- Carbon filter for reducing odours and fumes
- Compact and robust design
- Easy filter replacement and maintenance
- EC digital motor with excellent power-to-performance ratio and low operating costs
- Suitable for use in offices, schools, hospitals, sport facilities, restaurants, hotels, and any other indoor location.



Effectiveness against COVID-19

- Coronaviruses are highly susceptible to UV inactivation and recent studies indicate that even a low dose of UV-C radiation can achieve a 99.9% reduction of SARS-CoV-2¹⁻³.
- SARS-CoV-2 particles are between 0.06-0.14µm in diameter⁴ and emerging data suggests that HEPA filters are just as effective at capturing them as they are for other pathogens⁵⁻⁷.

Available to buy or hire – contact your nearest branch

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Technical Data

Specifications

Case	Case material	Zintec Steel
	Case colour	White
	Weight (kg)	49
Electric	Voltage (V)	230
	Mains frequency (Hz)	50
	Supply (no. of phases)	1
	Power, input, max. (W)	290
	Current, nominal (A)	2.4
	Isolation on/off switch	✓
Airflow & Filters	Airflow (m ³ /hr) ±5%	300-460
	Airflow (CFM) ±5%	176-270
	Noise level, max. (dBA) Measured at 1m distance	65
	Differential pressure gauge (Pa)	0-1250
	Pre-filter dimensions (mm)	295x295x45
	H14 HEPA filter dimensions (mm)	305x305x150
	UV-C Lamp radiation	4x11W @253.7nm
	Carbon filter dimensions (mm)	292x292x45
Dimensions	Case length, A (mm)	515
	Case width, B (mm)	490
	Case height, C (mm)	984
	Floor clearance height, D (mm)	65

Fan Speed	Airflow (m ³ /hr) ±5%	Room Volume (m ³) for 5 air changes/hr
0 (min.)	0	-
1	300	<60
2	340	<68
3	380	<76
4	420	<84
5 (max.)	460	<92

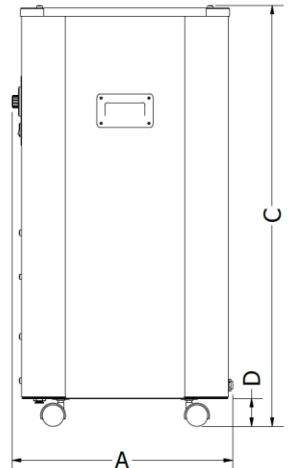
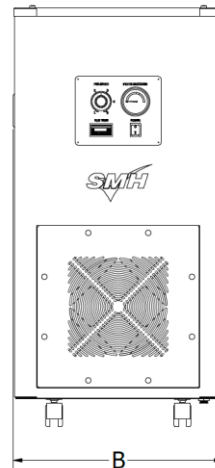
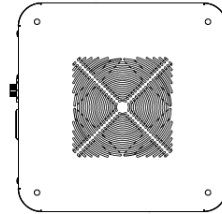
The effectiveness of the air purification unit is heavily dependent on environmental factors. Room sizes greater than 92 m³ will require additional purifiers and/or ventilation to achieve more than 5 air changes per hour, or 1 air change every 12 minutes. Multiple passes through the air purifier will be required to effectively clean larger rooms and/or rooms containing high levels of contaminants.



Certification

- All units come PAT and DOP tested;
- The HEPA filter complies with BS EN 1822-1;
- All appliances comply with BS EN 60335-2-69 Household and similar appliances;
- The units are manufactured at an ISO 9001 quality assured site.

Technical Drawing



References

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3. Biasin, M. et al. UV-C irradiation is highly effective in inactivating SARS-CoV-2 replication. Sci. Rep. 11, 1–7 (2021).
4. Zhu, N. et al. A Novel Coronavirus from Patients with Pneumonia in China, 2019. N. Engl. J. Med. 382, 727–733 (2020).
5. Christopherson, D. A., Yao, W. C., Lu, M., Vijayakumar, R. & Sedaghat, A. R. High-Efficiency Particulate Air Filters in the Era of COVID-19: Function and Efficacy. Otolaryngology - Head and Neck Surgery (United States) vol. 163 1153–1155 (2020).
6. EMG & SAGE. Potential application of Air Cleaning devices and personal decontamination to manage transmission of COVID-19 SAGE-EMG 4 th November 2020 Executive Summary. <https://www.gov.uk/government/publications/emg-potential-application-of-air-cleaning-devices-and-personal-decontamination-to-manage-transmission-of-covid-19-4-november-2020> (2020).
7. Conway-morris, A. et al. The removal of airborne SARS-CoV-2 and other microbial bioaerosols by air filtration on COVID-19 surge units. medRxiv (2021) doi:<https://doi.org/10.1101/2021.09.16.21263684>.