# **Specifications**

•	Case material	Zintec Steel
•	Case colour	White
•	Weight (kg)	49
•	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	$\checkmark$
•	Airflow (m <sup>3</sup> /hr) ±5%	300-460
•	Airflow (CFM) ±5%	176-270
•	Noise level, max. (dBA)	65

Measured at 1m distance 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 Case length, A (mm) 515 Case width, B (mm) 490 Case height, C (mm) 984

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# Certification

All units come PAT and DOP tested;

Floor clearance height, D (mm)

- 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.

# **Model Variants**

APU 500 Pre-filter, HEPA filter & Carbon filter ONLY

APU 500 UV Also includes UV-C lamps



# **Asbest Utstyr AS**

Johan Berentsens vei 41, 5163 Laksevåg Bergen, Norge

Kontor | Lager | Serviceverksted

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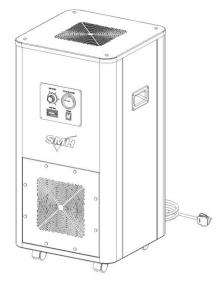
SMH House 29-33 Maxwell Street South Shields NE33 4PU United Kingdom 0191 456 6000 enquiries@smhproducts.com



# Clean Air Purification Units

Thank you for purchasing this product. Please read this user guide carefully before using the product and follow it for correct use. Please keep this user guide for future reference. Please read the "Safety Precautions" section before use.

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.



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# **Safety Precautions**

# Precautions to be observed are categorised using the following symbols:



WARNING Failure to follow these instructions properly may result in personal injury or loss of life.



**CAUTION** Failure to follow these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.



Never attempt.



Make sure to follow the instruction.



WARNING Observe in order to prevent fire, electric shock or severe injury.

### □ Concerning the power supply plug and chord



- > Do not unplug while the unit is in operation. (Fire due to overheating or electric shock may result)
- > Do not plug in or unplug with wet hands. (An electric shock may result)
- Do not use in such a way that the ratings of the power socket or wiring appliances are exceeded or use a voltage outside of the range AC 220-240V. (Fire may result from overheating if the ratings of the multi-socket power adapters, etc., are exceeded)
- > Do not pull on the power supply cord when unplugging. (Overheating or fire may result from wire breakage)
- Do not perform actions that might break the power supply plug and cord.
- Such actions including damaging, modifying, forcibly bending, pulling, twisting, bundling up, placing heavy objects on the
  power supply plug or cord.
- If the power supply plug is damaged, it must be replaced by our company (the manufacturer), a service centre authorised by
  us, or a similar qualified person in order to avoid a hazard. (An electric shock, short circuiting, or fire may result from use while
  damaged)



- Insert the power supply plug firmly all the way in.
- Do not use a damaged power supply plug or a loosely fitted power socket. (Electric shock, short circuiting or fire due to
  overheating may result if the power supply plug is not firmly inserted)
- Periodically wipe dust off the power supply plug with a dry cloth
- If the unit is not to be used for a prolonged period, unplug the power supply. (Fire may be caused by defective insulation resulting from dust build-up with moisture, etc.)
- > When moving the unit, make sure to turn off and unplug the unit. (An electric shock or injury may result)

## □ Do not use in the following places



- Places where oil or flammable gases are used or may leak. (Fire or smoke may result from ignition or suction toward the unit, or injury may result from degradation or cracking of plastic)
- Places where there are corrosive gases or metal dust particles. (Fire or smoke may result from ignition or suction toward the unit)
- Places where temperature and humidity levels are high or water may scatter, such as a bathroom. (Fire or an electric shock may result from electrical leakage)
- Places accessible to small children. (An electrical shock or injury may occur)

## □ During use



- Do not use chlorinated or acidic detergents. (Injury may result from degradation or cracking of plastic parts, or harm may be caused to health from the production of toxic gases)
- Keep burning cigarettes or incense sticks away from the unit. (Fire or smoke may result from ignition or suction toward the unit)
- Do not attempt to disassemble, reconstruct or repair the unit yourself. (Fire, an electric shock or injury may result) For repairs, please contact the place of purchase.
- Do not insert fingers, sticks, or any other item, into the air inlet or air outlet. (An electric shock, injury or damage may result)
- Do not pour water onto the air outlet or the unit. (Fire or an electric shock may result)
- Do not use flammable substances (hair spray, insecticide, etc.) near the unit.



**CAUTION** Using these Units for other purposes is considered contrary to their intended use. The manufacturer accepts no liability for any damage or injury resulting from such use.



WARNING Observe in order to prevent fire, electric shock or severe injury.



WARNING Never look directly at a lighted UV lamp. Ultraviolet rays can be harmful to eyes.

### □ Concerning the UV lamps



- > These units contain lamps that produce UV light.
- Avoid exposure to direct or reflected ultraviolet rays.
- When performing maintenance, or replacing the pre-filter, always turn off and unplug the unit.
- Immediate or prolonged exposure to UV light can result in painful eye injury, skin burn, premature skin aging, or skin cancer.

### □ Immediately turn off and unplug the unit if there are any signs of abnormality and malfunction



- Examples of abnormality and malfunction. Contact the place of purchase.
- The unit does not operate even if the switch is turned on.
- · Current passes through the cord or fails to pass through if the cord is moved.
- There are abnormal sounds or vibrations during operation.
- · The casing of the unit has become deformed or is abnormally hot.
- There is a burnt smell. (Malfunction, an electric shock, smoke, fire, etc., may result if the abnormality is not addressed and the
  unit continues to be used).



**CAUTION** Observe in order to prevent electrical leakage, injury or property damage.

#### □ During use



Small children or immobile persons (due to illness or injury) should not operate the unit by themselves.

#### ¬ For UK and EU:

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shift not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

### □ For other regions:

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- Children should be supervised to ensure that they do not play with the appliance.
- Persons who are heavily intoxicated or have taken sleep medication should not operate the unit. (An electric shock, injury or poor health may result)
- Do not use products that contain fine powder, such as cosmetics, near the unit. (An electric shock or malfunction may result)
- Do not operate the unit when fumigating insecticide is in use.
- After using insecticide, be sure to sufficiently ventilate the room before operating the unit. (Harm may be caused to health from an outflow of accumulated chemical compounds from the outlet)
- Do not use the unit near a smoke detector.
- If the air coming out of the unit flows in the direction of the smoke detector, the response of the smoke detector may be
  delayed or it may fail to detect smoke.



- Frequently ventilate the room when using the unit together with combustion-based heating devices.
- Usage of this product is not a substitute for ventilation. (Potential cause of carbon monoxide poisoning).

  This product cannot eliminate carbon monoxide.
- > If the unit is placed within reach of a pet, be careful that the pet does not urinate on the unit or chew on the power supply cord. (Fire, an electric shock or injury may result)

### □ Concerning the unit body



- Do not block the air inlet or air outlet with laundry, cloth, curtains, etc. (Overheating or fire may result from poor circulation)
- > Do not climb, sit or lean on the unit. (Injury may result from falling or toppling)

### □ When moving the unit



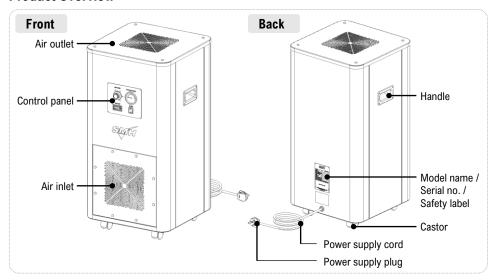
- When picking up the unit to move it, handle the unit with caution.
- Be sure to always hold the unit using the correct handle locations.

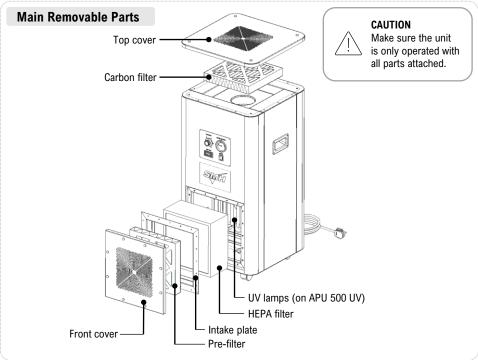


**CAUTION** Using these Units for other purposes is considered contrary to their intended use. The manufacturer accepts no liability for any damage or injury resulting from such use.

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# **Product Overview**





# **Control panel**

# SPEED CONTROLLER "FAN SPEED"

5 modes for airflow speed

Fan Speed	Airflow (m³/hr)±5%	Room Volume (m³) @ 5 air changes/hr
1 (min.)	300	< 60
2	340	< 68
3	380	< 76
4	420	< 84
5 (max.)	460	< 92

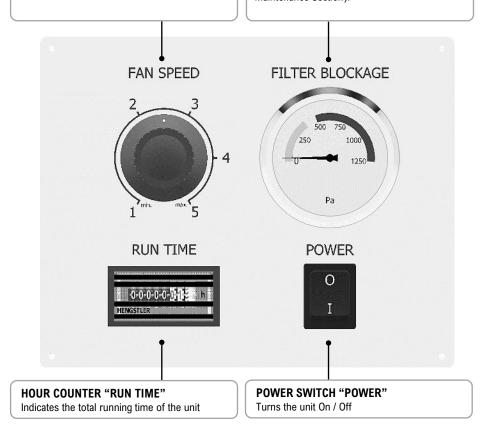
# PRESSURE GAUGE "FILTER BLOCKAGE"

Monitors internal pressure and indicates level of filter blockage

**GREEN** = correct pressure for maximum efficiency

**ORANGE** = higher pressure than normal, the unit is operating at reduced efficiency as the filter(s) are partially blocked and may need replacing (refer to *Maintenance Section*).

**RED** = pressure is too high, the unit is operating at minimum efficiency as the filter(s) are blocked and **must be replaced** (refer to *Maintenance Section*).



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# **Using the Unit**

## **POSITION THE UNIT**

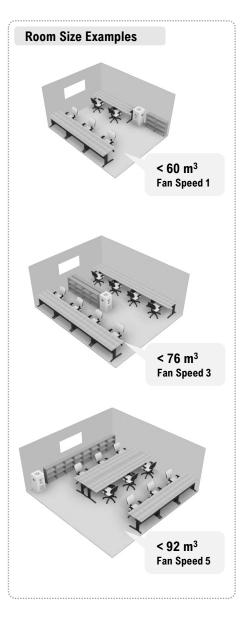
- Choose a position from where airflow can reach all areas of the room.
- Place the unit on a stable surface. If the unit is placed on an unstable surface, vibrations from the unit may be amplified.
- If you find that interference from the power circuit inside the unit or cables causes interference on your TV screen or static noise to be emitted from nearby radios or stereos, move the unit to at least 2m away from the device.

### **POWER THE UNIT**

- Insert the power supply plug into the wall
- Press the power switch **On / Off** to switch on the unit.

#### 3 **CHANGE THE FAN SPEED**

- Turn the fan speed controller to the desired setting 1 - 5.
- To achieve a minimum of 5 air changes per hour, you must adjust the speed according to the volume of the room the unit is operating in. See the Fan Speed vs. Room Volume table in the Product Overview section.
- The effectiveness of the unit is heavily dependent on environmental factors. Room sizes greater than 92 m<sup>3</sup> 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.



## Maintenance

### CLEANING

When dirt becomes an issue

- Wipe up dirt with a soft damp cloth.
- · When dirt build-up is severe, wet a cloth with kitchen-use neutral detergent and wipe up the dirt.
- Do not use a hard brush etc. as you may damage and scratch the unit.



# WARNING

You MUST always turn OFF and unplug the unit before carrying out ANY maintenance work!

# **CHANGING THE PRE-FILTER**



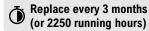
**Step 1:** Open the cover caps and unscrew the 8 screws which secure the front cover, then remove this.

Step 2: Remove the old pre-filter, and replace this with the new one.

Then reverse Step 1 to reassemble.



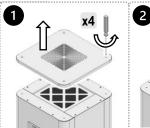
# CHANGING THE CARBON FILTER

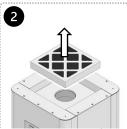


**Step 1:** Open the cover caps and unscrew the 4 screws which secure the top cover, then remove this.

Step 2: Remove the old carbon filter, and replace this with the new one.

Then reverse Step 1 to reassemble.





# CHANGING THE HEPA FILTER AND UV-LAMPS

Replace every 12 months (or 9000 running hours)

Please contact your nearest SMH branch or approved service centre to replace the HEPA filter and UV lamps as part of the annual service.

This must be carried out by trained and authorised personnel.



**WARNING** Do not attempt to replace the UV lamps yourself. Serious injury may occur.