



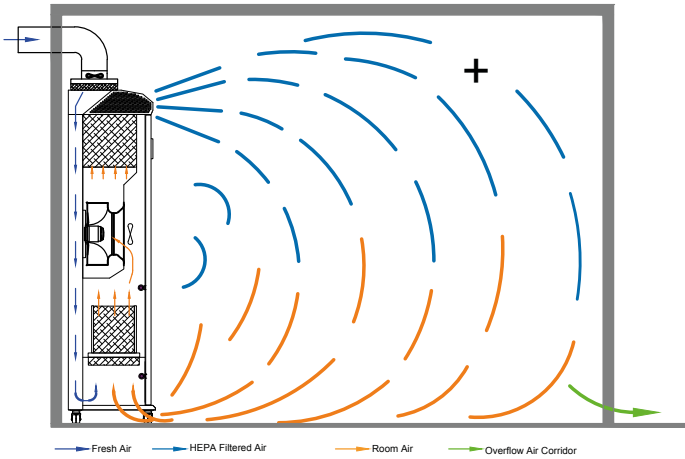
PORTABLE HYGIENIC AIR FILTRATION UNIT

Metisafe® AC-1500 Portable air filtration device is used in environments that need “Critically Important Clean Air”, in order to provide environment pressure and filtration.

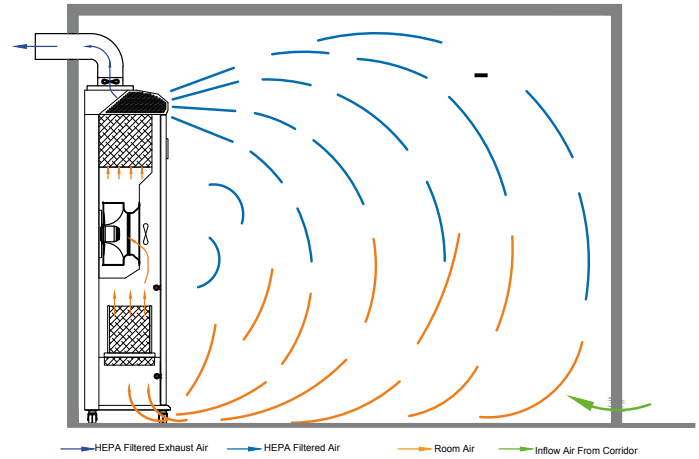
Usage areas;

- Industrial cleanrooms and laboratories
- Infection control units
- Protective or Infectious Patient Isolation
- Intervention and Examination rooms
- Intensive Care Units (ICU)
- Newborn units
- Dental health centers
- Cell culture laboratories
- Molecular analysis laboratories
- Animal research laboratories

Positive Pressure Working Mode



Negative Pressure Working Mode

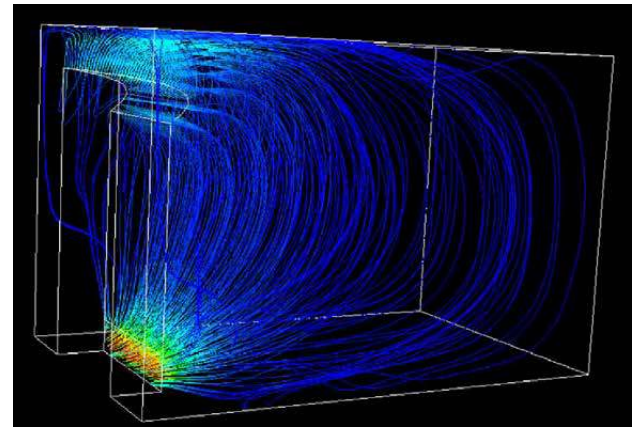


The ambient air is taken from the bottom of the device. The air is firstly put through a two-step pre-filtration. The air that is purified from solid particles is HEPA filtered and is released to the environment through the air distribution diffuser.

As the clean air is released close to the ceiling area of the room, a positive pressure field is created on the top part of the cleanroom. By this effect the polluted air is pushed towards the cleanroom to floor area. Short circuit in air movements (suction of the clean air by the device before the air is released in to the environment) is prevented. This causes an active particle removing speed.

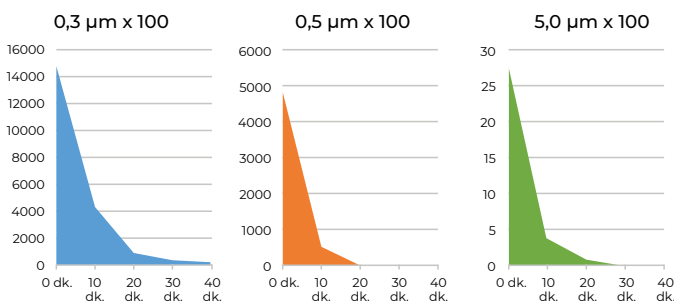
The device can be adjusted with connection options to create positive and negative pressure. In the positive pressure mode, the device can receive air from outside by using the duct connection that has been established. In the negative pressure mode, the device can exhaust a portion of the hepa filtered air through the duct connection that has been established to the external environment.

By pre-filtration, the contamination of the inner parts of the device is prevented and the lifespan of the hepa filter is extended. The surfaces of the pre-filters are disinfected by UV lights to prevent the breeding of microorganisms.



CFD (Computational Fluid Dynamics) Air Flow Modelling

Metisafe AC-1500 is designed with consideration of the HIGH SUPPLY-LOW RETURN method according to the ASHARE and CDC standards. With the Specially Designed Distribution Diffuser, air distribution that can reach into dead zones and Active Particule Removing Efficiency is provided.



Time	0,3 µm x 100	0,5 µm x 100	5,0 µm x 100
0 min.	15000	4880	27,2
10 min.	4290	523	3,4
20 min.	872	93,4	0,9
30 min.	298	29,1	0
40 min..	239	27,8	0

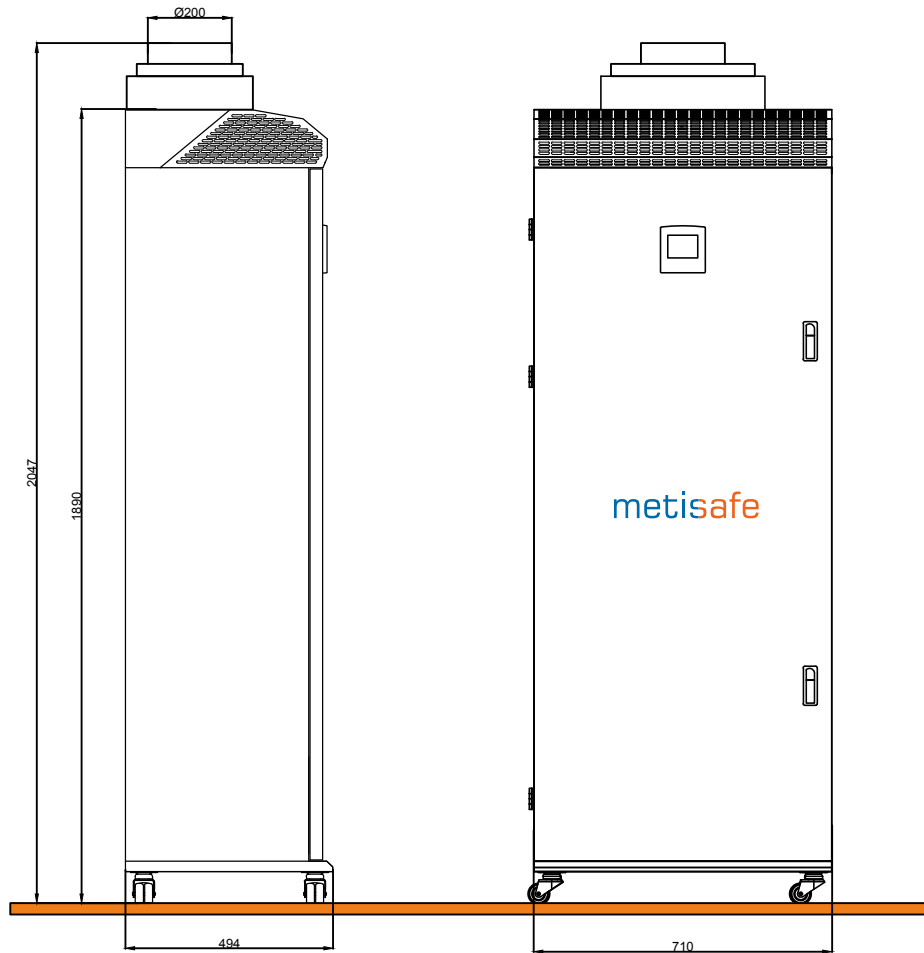
Experimental Air Flow : 800 m³/h
 Room Volume : 50 m³
 Air Exchange Number: 16 (ACH)

MICROPROCESSOR CONTROL SYSTEM



- Programming on/off timer setting (days/weeks),
- Airflow rate setting
- Automated air flow rate and velocity compensation system,
- HEPA Filter Life (percent),
- Blower and UV lamp working Times,
- Audible and Visual Alarms for Air Flow/Rate,
- System ready information,
- Filter/Lamps replacement warning,
- Service need alarm,
- Filter time zero setting.
- Language selection (Turkish, English, German and Arabic)





AC-1500 PORTABLE HYGIENIC AIR FILTRATION UNIT

Dimensions (WxLxH) mm	717 x 513 x 2000	
Air Flow Rate (m ³ /h)	1500 (Max)	
Air Flow Pattern	Turbulence	
Supply Air Velocity Range	0.3-1.5 m/s	
Filter Types (EN 1822)	Pre Filtre-1	F5
	Pre Filtre-2	V Type High Capacity EU7 8.5 m ²
	Main Filter	Hepa, H14 %99.995, 0,3 µm 30.0 m ²
Supply Air Class	EN ISO 14644-3	< ISO 5
	US FED 209E	< Class 100
Noise Level (100 cm distance)	Normal Mode	< 50 dB (A)
	Eco Mode	< 42 dB (A)
Energy Consumption 230 VAC- 50Hz	Fan Filter Unit	200 W
	UV Lamp	30 W
Supply voltage and frequency	230 W / 1 A	
Weight (kg)	90 kg	
Packaged Total Weight (Excluding Fresh Air Fan)	120 kg	
Pack/Palette Dimensions (WxLxH) mm	1000 x 635 x 2120	
Main Body Construction Material	Antibacterial Epoxy Powder paint Coated Sheet Steel	
Internal Construction Material	Antibacterial Epoxy Powder paint Coated Sheet Aluminum	
Microprocessor Control System	Programming on/off timer setting (days/weeks), Inflow and Air Velocity/Flow Rate adjustment, Automated air flow rate and velocity compensation system, HEPA Filter Life (percent), Blower and UV lamp working Times, Audible and Visual Alarms for Air Flow/Rate, System ready information, Filter/Lamps replacement warning, Service need alarm,	
Remote Controller	On/Off button and timer setting, Air flow rate selection and setting	