metisafe
CLEANROOM & BIOSAFETY

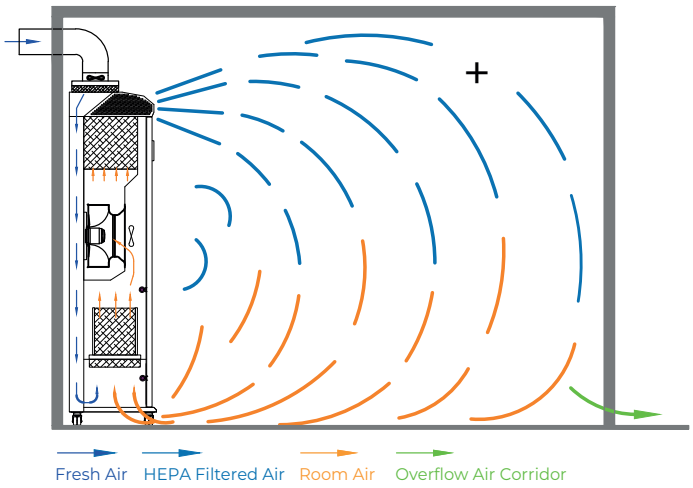
PORTABLE HYGIENIC AIR FILTRATION UNIT

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.

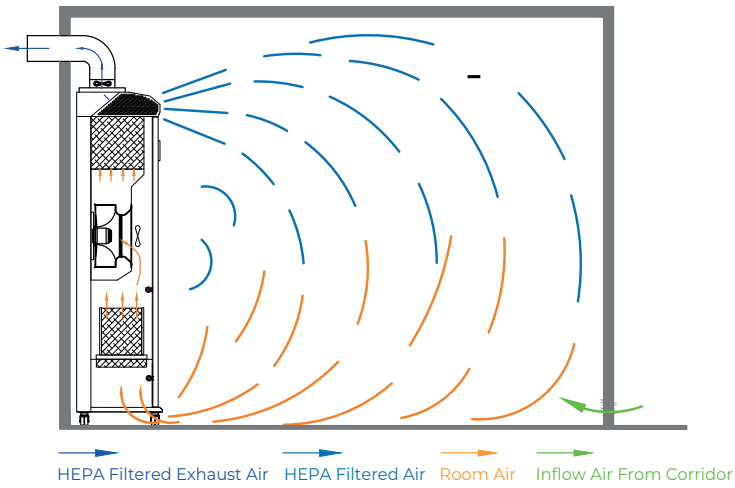
Usage areas;

- Industrial cleanrooms and laboratories
- Intervention and Examination rooms
- Intensive Care Units (ICU)
- Newborn units
- Dental health centers
- Cell culture laboratories
- Molecular analysis laboratories
- Animal research laboratories

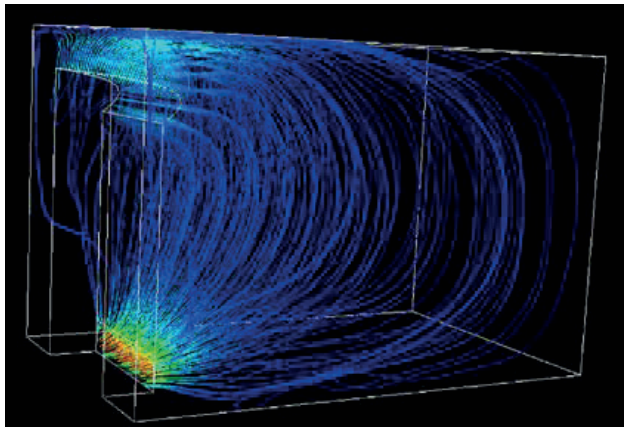
Positive Pressure Working Mode (Optional)



Negative Pressure Working Mode (Optional)

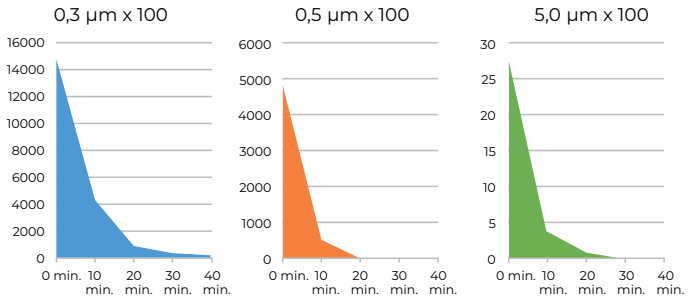


The ambient air is taken from the bottom of the device. The air is firstly put through a two-step pre-filtration. The air that is purified from solid particules is HEPA filtered and is released to the environment through the air distribution diffuser. As the clean air is released close to the ceiling 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 particule removing speed. The device can be adjusted with connection options to create positive and negative pressure. In the positive pressure mode, the device can recieve 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 establishedto 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 (Computional 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 Efficency 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

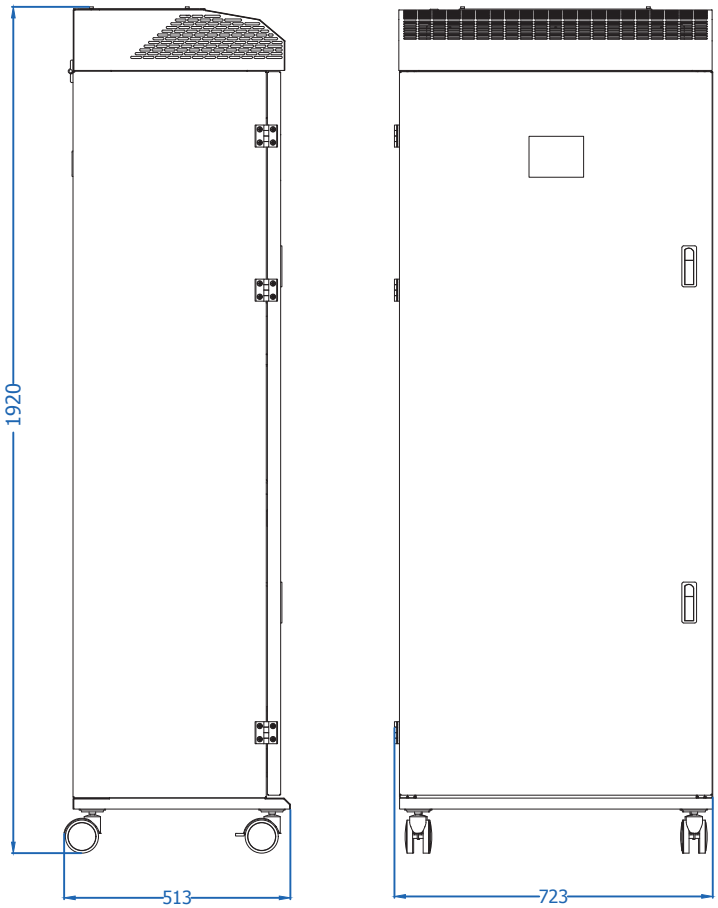
Experimental Air Flow : 800 m3/h
Room Volume : 50 m3
Air Exchange Number: 16 (ACH)

MICROPROCESSOR CONTROL SYSTEM

- Color Screen Touch Control Panel: Airflow, Total Working Times, UV Lamps, Working Times, Information Incase of Alarm, Filter Replacement,
- Standby Mode
- Temperature and Humidity Sensor (Optional)
- Automated Air Flow Rate And Velocity Compensation System
- Remote Controller (On - Off , Normal Mod – Stand-by Mod)
- Working Timer (Month, Day, Hour)
- Language Selection (Turkish, English, German and Arabic)

ISO 14644

CE



AC-1500 PORTABLE HYGIENIC AIR FILTRATION UNIT		
Dimensions (WxLxH) mm		723 x 513 x 1920
Air Flow Rate (m^3/h)	Standby Mode	400 m^3/h
	Normal Mode	800 m^3/h
	Maximum	1500 m^3/h
Air Flow Pattern		Turbulance
Filters (EN 1822)	Pre Filtre-1	EU4
	Pre Filtre-2	V Type High Capacity F7 8.5 m^2
	Main Filter	HEPA, H14 %99.995 0.3 µ30 m^2
Exit Air Class	EN ISO 14644-3	Class 100
	US FED 209E	ISO 5
Air Mixing Factor M (ASHRAE Guidelines)		1:1
Noise Level (1 m distance)	Standby Mode	≤ 60 dB (A)
	Normal Mode	≤ 65 dB (A)
Supply Voltage and Frequency		220-240 V, 50-60 Hz
UV Lamp Power		2 x 15 W
Power Consumption Under Normal Operating Conditions (UV and Fan Motor)		≤ 180 W
Weight		115 kg
Packaged Total Weight		160 kg
Pack/Palette Dimensions (WxLxH) mm		566 x 2016 x 860
Main Body		Antibacterial Epoxy Powder Paint Coated Sheet Steel
Remote Controller		On / Off, Air flow rate selection and setting

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