

CHEMICAL BIOLOGICAL RADIOLOGICAL FILTER



About Product

The Ultrapure Chemical Biological Radiological air filtration technology is the cornerstone of Ultrapure' worldwide success. The latest breakthrough in Filtration & Purification technology increases efficiency of the system by combining an Electrostatically Charged Filter with both a particle charging section and gas filter in the system for destroying any airborne virus or bacteria, molds, VOC's including microscopic molecules along with massive dust holding capacity achieved in extremely low pressure drop.

The particle filtration properties of the Chemical Biological Radiological Filtration solutions are presented in Figure 1 and Figure 2. The figures show that e.g. tobacco smoke is exactly on the size region where the standard filters have a minimum efficiency. Chemical Biological Radiological Filtration on the other hand has high filtration efficiency even for smallest particle sizes that the measurement devices were capable of detecting. The standard filters cannot remove bacteria, not to mention viruses. To give a more detailed view of sizes in question when talking about bacteria and viruses.

The Advantages are High Efficiency for removing

1. Fine Particles
2. Bacteria & Virus.
3. Harmful gases together with massive dust-holding capacity.

Features



Removes
Viruses, Bacteria
& Spores



Removes
Dust, Dander
& Pollens



Removes
SOx, NOx
& O3



Removes
VOCs
& Odors



Removes
PM2.5 &
PM10

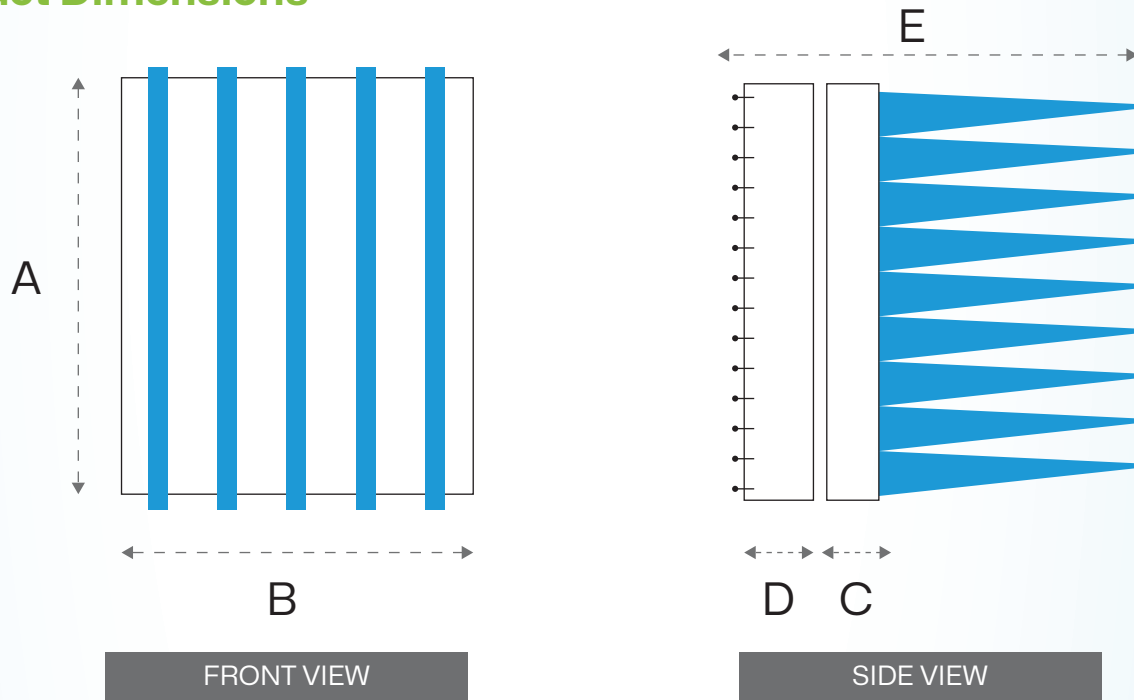


Low Power
Consumption

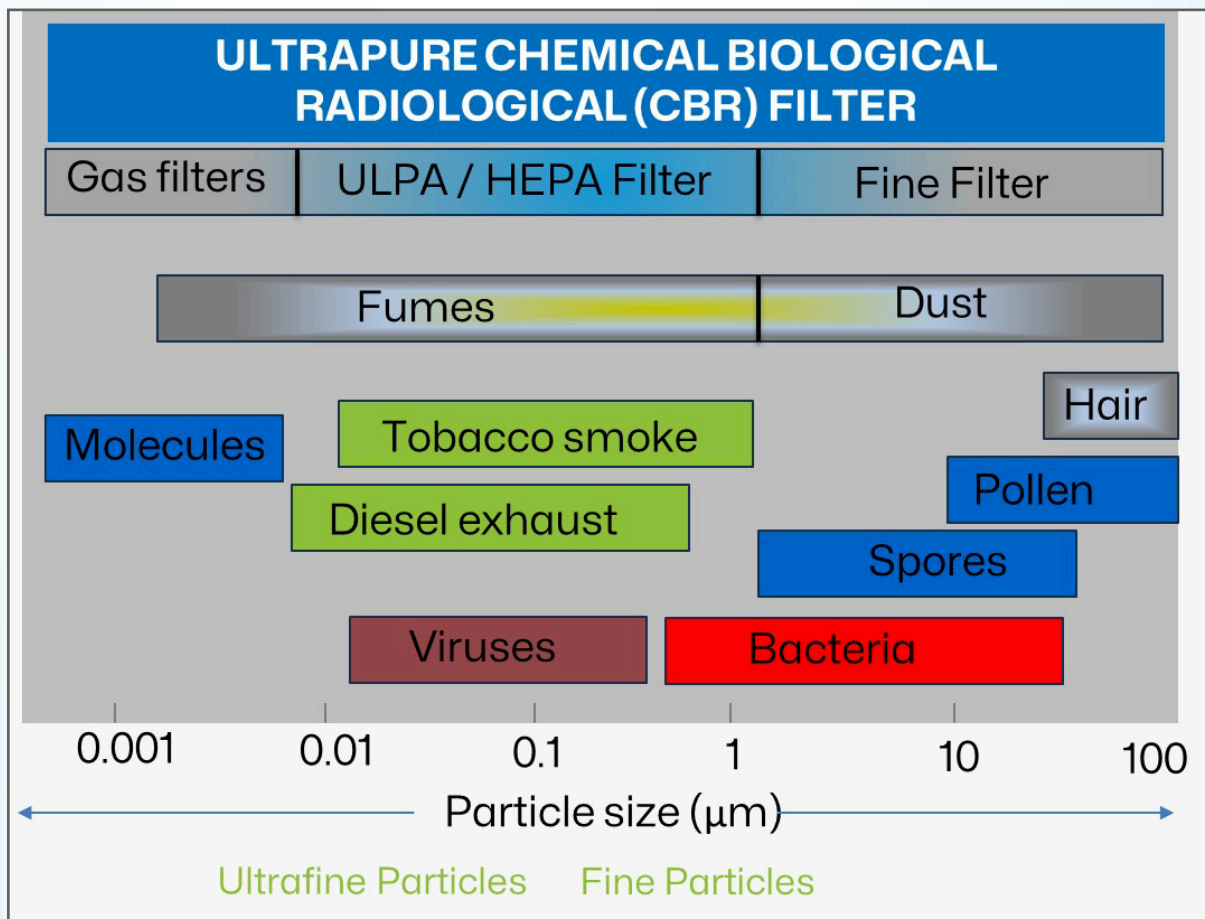


Ultralow Air
Resistance

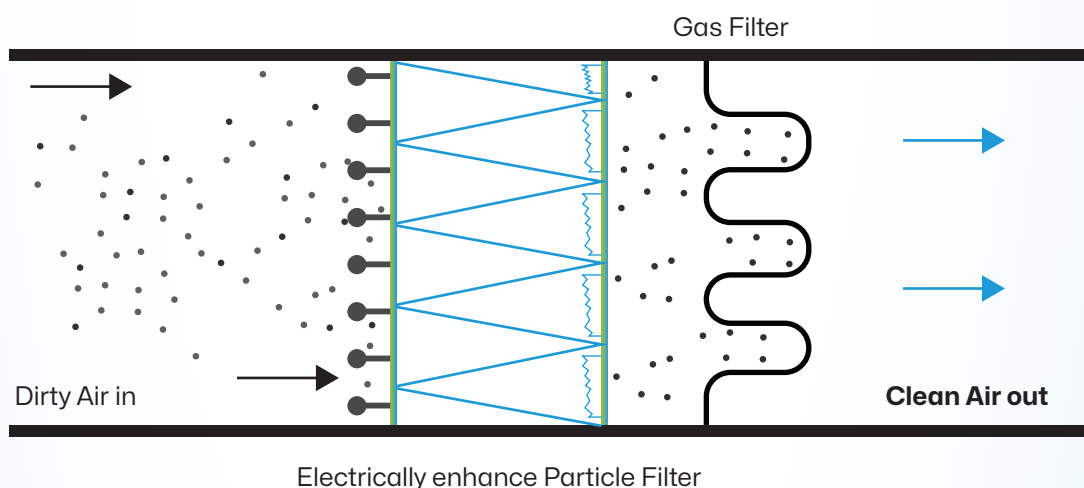
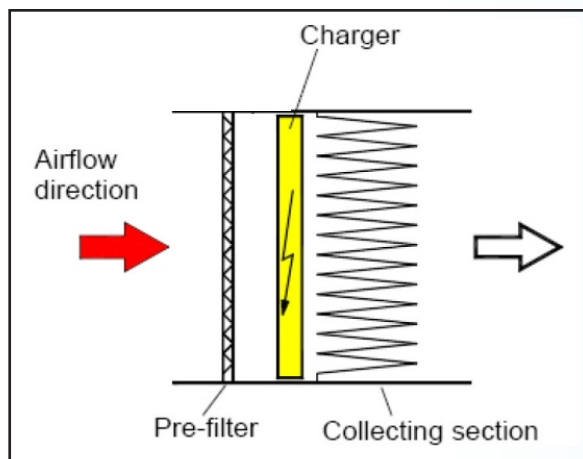
Product Dimensions



CFM	A	B	C	D	E
2000	595	595	25	50	350
1000	300	595	25	50	350



Novel Filtration Technology Principle



Sr. No.	PARTICULARS	REQUIREMENTS
1	Efficiency (Particulate Matter)	>95% down to 0.1 micron
2	Filtration Efficiency as per MERV-16	>95% down
3	Efficiency for gases (VOC) Toluence with 944 l/s	80%
4	Components	plasmOX + Gas Filter
5	Net Weight (Kg)	Upto 3kg
6	Filter Size (for 2000 CFM)	595*595*350 (W*H*D)
7	Filter Size (for 1000 CFM)	595*300*350 (W*H*D)
8	Technology of the filter	Trap & Kill
9	Structure of Filter	Monoblock- Self Supporting
10	Dust Holding Capacity	150g/m ²
11	Initial Pressure Drop	20Pa
12	Finally recommended Pressure Drop	400Pa
13	Number of Pockets	15
14	Filter Material for particles, synthetic fibers	250g/m ²
15	Filter material for gases, non woven loaded with granular activated Odor removal particales	500g/m ²
16	Average Arrestance	99%

SIZE (microns)	UPSTREAM	DOWNSTREAM	EFFICIENCY (%)
0.162 - 0.168	339076	<1	>99.9995
0.168 - 0.174	287289	<1	>99.9995
0.174 - 0.180	277916	<1	>99.9995
0.180 - 0.186	284249	<1	>99.9995
0.186 - 0.192	283782	<1	>99.9995
0.192 - 0.198	270160	<1	>99.9995
0.198 - 0.204	266849	<1	>99.9995
0.204 - 0.210	272147	<1	>99.9995

MEASURED EFFICIENCY IN SIZE RANGE OF
Particulate concentration (1d/m³)

0.17 - 0.62 µm

SIZE (MICRONS)	UPSTREAM	DOWNSTREAM	EFFICIENCY (%)
0.17 - 0.20	1522756	<1	>99.9995
0.20 - 0.23	1313022	<1	>99.9995
0.23 - 0.26	1097367	<1	>99.9995
0.26 - 0.29	899189	<1	>99.9995
0.29 - 0.32	611233	<1	>99.9995
0.32 - 0.35	614111	<1	>99.9995
0.35 - 0.38	725189	<1	>99.9995
0.38 - 0.41	826944	<1	>99.9995
0.41 - 0.44	258400	<1	>99.9995
0.44 - 0.47	217089	<1	>99.9995
0.47 - 0.50	132400	<1	>99.9995
0.50 - 0.53	79389	<1	>99.9995
0.53- 0.56	60789	<1	>99.9995
0.56 - 0.59	55122	<1	>99.9995
0.59 - 0.62	60611	<1	>99.9995

The filtration efficiencies are over **99.9995%** in the size range of **0.12 -0.21** micrometre. The most penetration particles size for ULPA filters is stated typically to be at 0.12 micrometer.

Filter Classes according EN1822	Filter Groups according ISO 29463	Overall Value		Local Value	
		Efficiency	Penetration	Efficiency	Penetration
H14	ISO 50 U	$\geq 99.999\%$	$\leq 0.001\%$	$\geq 99.995\%$	$\leq 0.005\%$

Our Certifications



ULTRAPURE ENVIROCARE PRIVATE LIMITED

Head Office: 3rd Floor, Ion House, Dr. E. Moses Road, Mahalaxmi, Mumbai-400011



www.ultrapureindia.in



info@ultrapureindia.in