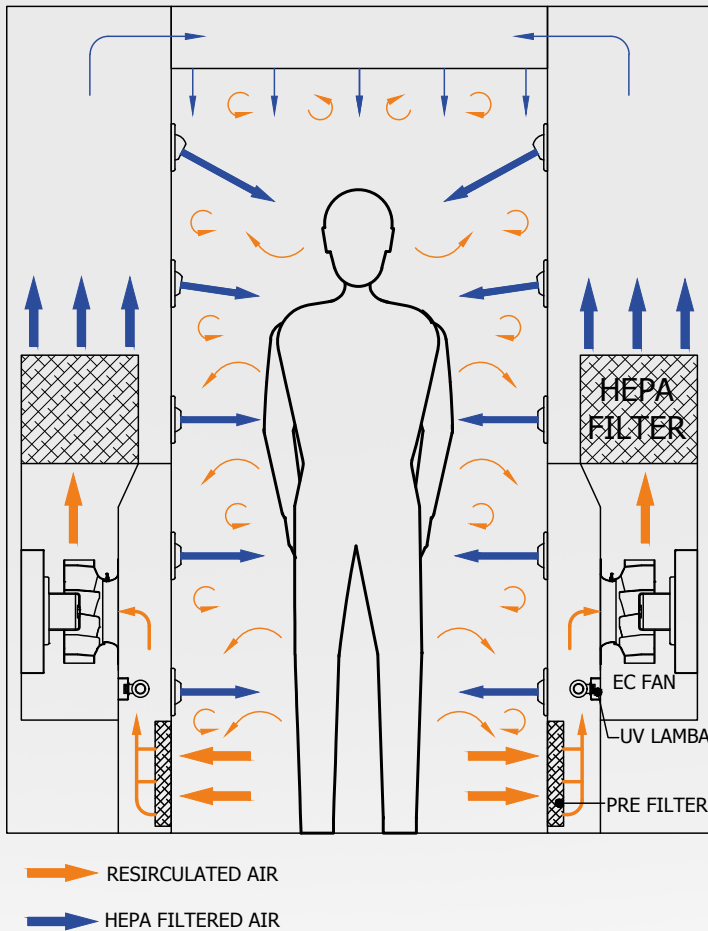




## METISAFE AIR SHOWER & AIR LOCK

- All volume / area effective air movement by high velocity air jets
- H14 HEPA filtration
- Energy saving low resistance unique HEPA unit (E-Series)
- Positive / Negative / Neutral pressure working position flexibility
- Stainless steel inner surface
- GMP compatible (E-Series)



## WORKING PRINCIPLE

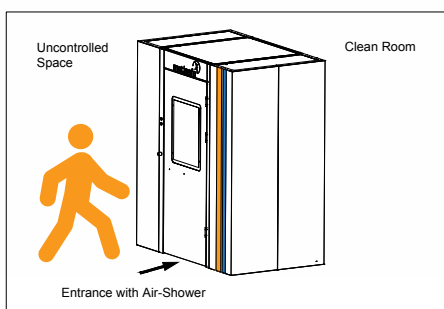
Metisafe Air-Lock & Air-Shower units are used for personnel entrance to controlled clean environments. Those units have critical importance to keep quality at GMP/cGMP qualified production/ manufacturing plants. ISO5 Cleanliness Class HEPA filtered air in is blow out from the adjustable air nozzles at a rate of  $> 20\text{m/s}$  onto the personnel or material. Efficiently guided high-speed air sweeps materials and particles from personnel. The swept particles are sucked through the air suction grids located close to the ground. The air shower unit operates on the recirculation principle. The intaken air passes through the prefilter to remove coarse particles. The filtered air from the coarse particles gets directed to the blowing nozzles after HEPA filtration. This process repeats during set time in each pass. The air shower unit operates in Standby mode when there is no active usage. The low-speed fan ensures onstant cleanliness inside the cab.

## CONTROL BOARD

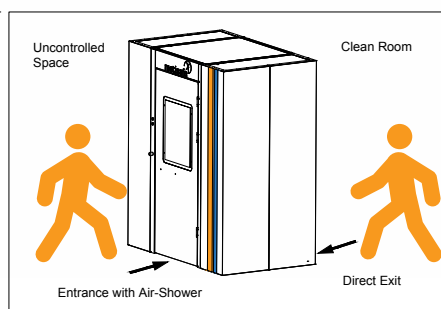


- - 4.3" Touch Screen
- - Access Control Process Time Setting
- - Displays Air Flow Rate and Operating Parameters
- - Visual and Audible Warning System
- - Online Air Flow Measurement
- - Advanced Filter Compensation
- - Communication Output for BMS Systems
- - Service Alert
- - Filter Replacement Warning

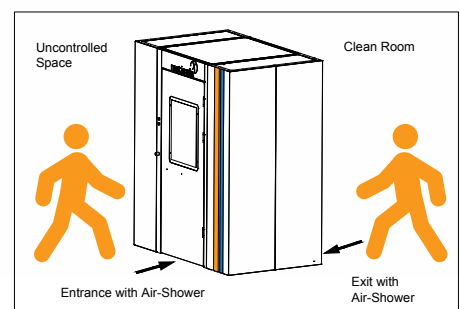
ONE WAY PASS

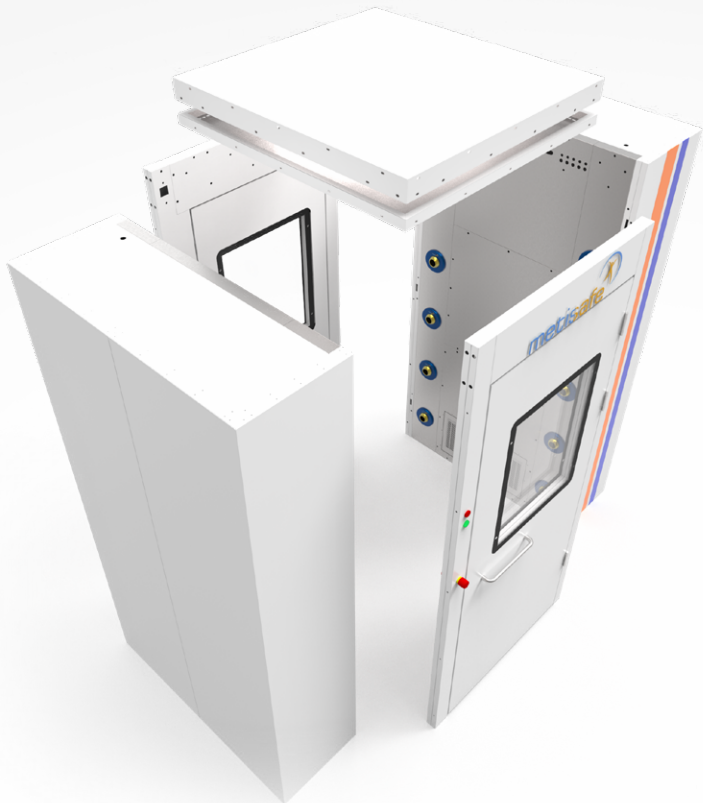
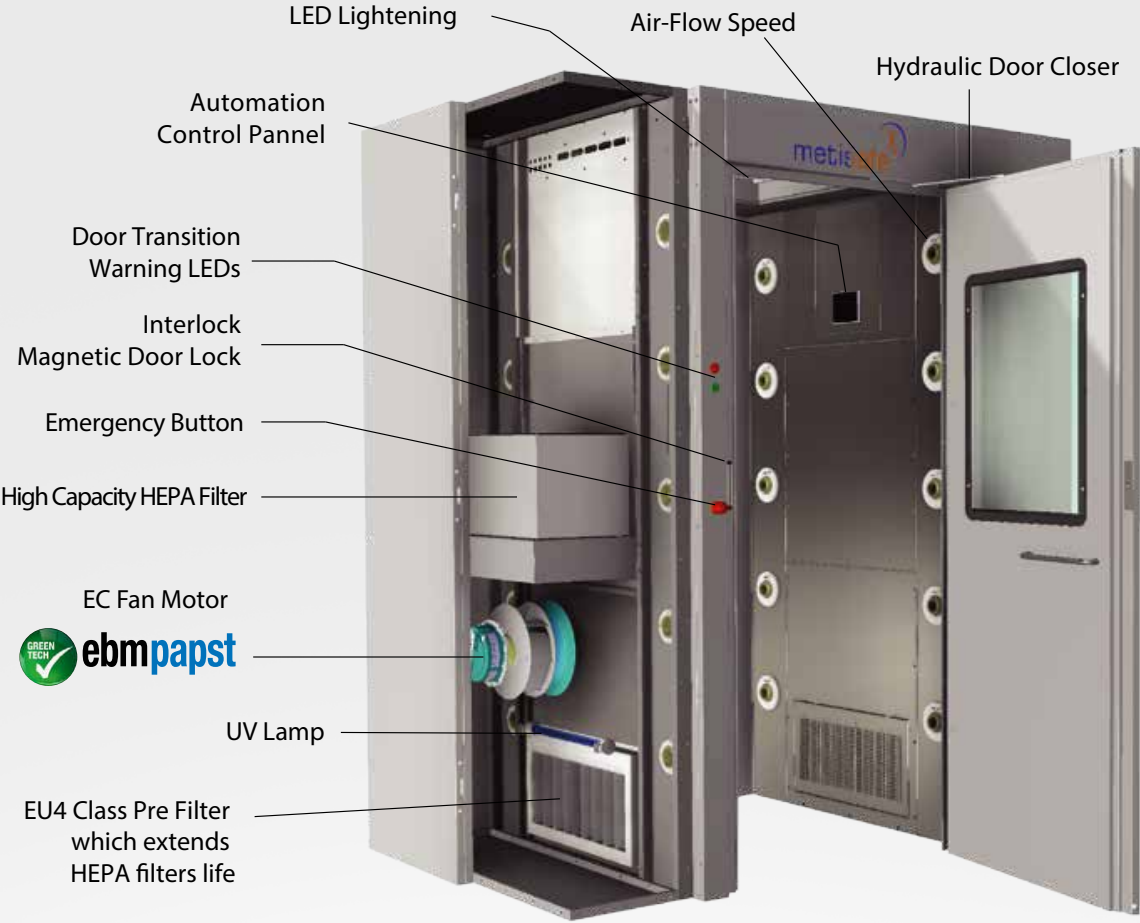


ONE WAY AIR-SHOWER  
TWO WAY PASS



TWO WAY AIR-SHOWER

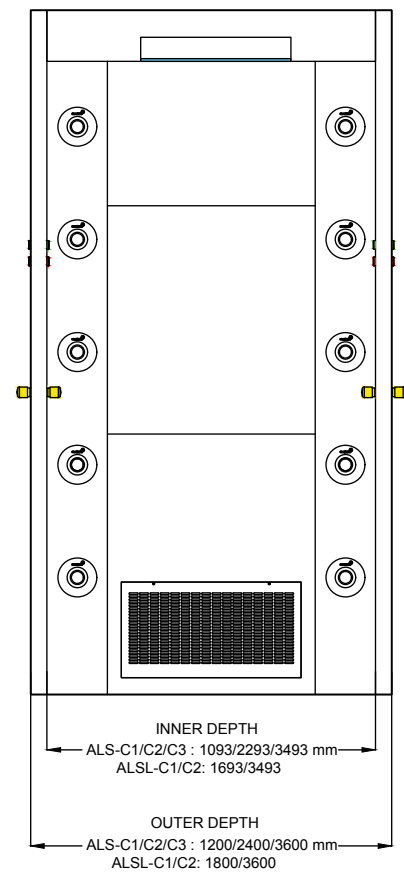
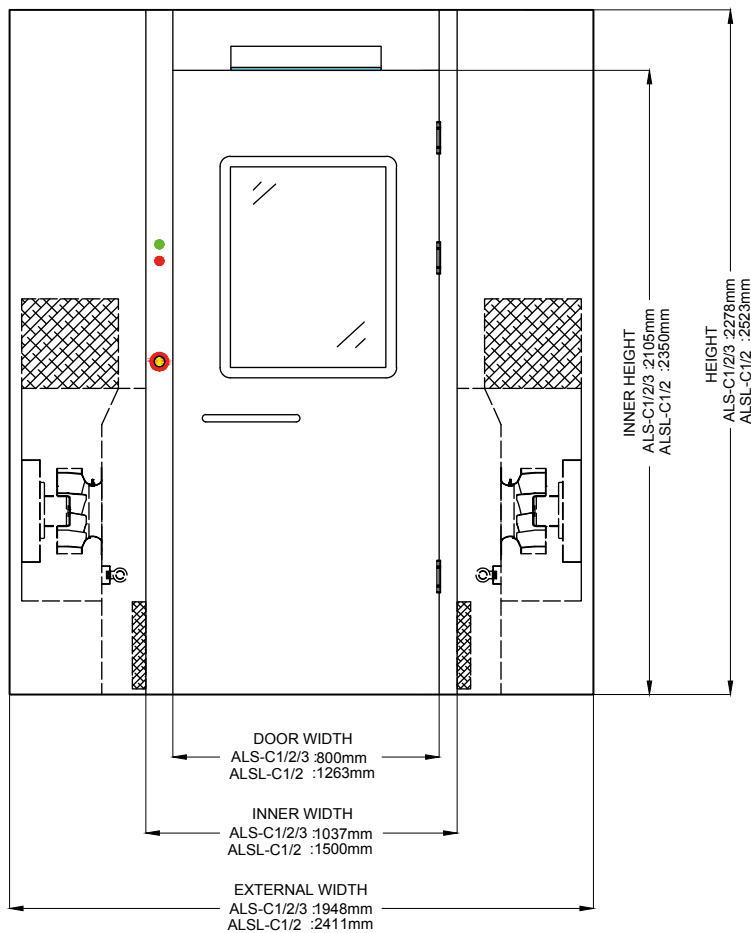




Functional Modular Design for Easy Installation



Door Warning Lamps  
Emergency Opening Button



#### METISAFE AIR LOCK & AIR SHOWER TECHNICAL SPECIFICATIONS

| Model                              | ALS-C1   | ALS-C2                                     | ALS-C3         | ALSL-C1        | ALSL-C2        |
|------------------------------------|--|--|----------------|----------------|----------------|
|                                    | ALS-E1   | ALS-E2                                     | ALS-E3         | ALSL-E1        | ALSL-E2        |
| Internal Dimensions (W x L x H) mm | 1037x1093x2105   | 1037x2293x2105                             | 1037x3493x2105 | 1500x1693x2350 | 1500x3493x2350 |
| External Dimensions (W x L x H) mm | 1948x1200x2278   | 1948x2400x2278                             | 1948x3600x2278 | 2411x1800x2523 | 2411x3600x2523 |
| Weight (kg)                        | 410 kg   | 820 kg                                     | 1230 kg        | 650 kg         | 1200 kg        |
| Filter initial resistance (max Pa) | 120  |  |                |                |                |
| Noise Level                        | < 65 dB(A)   | < 68 dB(A)                                 | < 70 dB(A)     | < 72 dB(A)     | < 74 dB(A)     |
|                                    | < 55 dB(A)   | < 55 dB(A)                                 | < 55 dB(A)     | < 55 dB(A)     | < 55 dB(A)     |
| Filters (EN 1822)                  | Pre Filter   | EU4  |                |                |                |
|                                    | Main Filter  | H14 class high capacity V type HEPA filter |                |                |                |
| Fan Filter Motor Power (watt)      | 1500 W   | 3000 W                                     | 4500 W         | 3000 W         | 6000 W         |
| Supply Voltage / Frequency         | 230 V / 50-60 Hz / 380 V   |  |                |                |                |
| Air Change per hour (ACH)          | > 1000   |  |                |                |                |
| Lumination                         | > 800 lux  |  |                |                |                |
| Air jet velocity                   | 10-22 m/s  |  |                |                |                |
| Main Body                          | Main body ; antibacterial powder paint coated AISI 10xx series carbon steel,<br>Inner surfaces ; AISI Type 304 stainless steel (C series)<br>GMP compatible AISI Type 316 or 316L SS stainless steel for main body and inner surfaces (E series) |  |                |                |                |
| Air Lock controlled door system    | Antibacterial powder paint coated AISI 10xx carbon steel surfaces, doors included hydraulic closer system, hygienic stainless steel door handle, tempered glass window, adjustable overflow outlet duct, automatic drop down seal                |  |                |                |                |
| Microprocessor control parameters  | Positive/Negative/Neutral air pressure adjustment flexibility, System Ready/Not-Ready lamps, Stand-by option button, Service need warning, Filter replacement warning.   |  |                |                |                |