UlpaFlow Vertical Laminar Flow with Microprocessor Controller

- SASTEC Laminar Flow Clean Bench is a made-in Malaysia product with advance technologies features. The Clean Bench has been tested for safety and performance accordance to Australian Standard AS 2243-8, All materials used are suitable for operation in cleanroom environment.
- The UV fuction will be disconnected when the sash is being lifted and the motor blower will resume the normal function. Product certified by MIDA & JKPDNKK as "Buatan Malaysia".
- Compliance to IEST-RP-CC034-1 in accordance with EN1822. Ulpa filters tested to a typical efficiency of >99.9995% for 0.12-0.3 or larger particles.
- The components of the Laminar Flow Clean Bench has CE Marking, UKAS registration ISO 9001:2008
- Typical life span of ULPA filter is well over 3 years subjected to operation environment.
- Filter is mounted and protected by aluminium frame work with gasket to provide leak-free condition.
- UV safe Polyglass window on both sides provide maximum chemical resistant and enhance durability for a long service life.
- Digital controller for the power, air flow speed, UV and fluorescent light.
- Electronic ballast featured lamp provides excellent lighting inside the working chamber. Lamps are located at the top front, away from the eye contact with the operator.
- Auto Sash, Powder Coating Anti Bacteria
- Work top constructed with AISI 304 stainless steel, chip and rust free.
- Two electrical socket, gas tap and support stand are standard features.
- 12 months warranty period against manufacturer’s defect on non consumable parts.
- Supply with test report.

Specification of Ulpaflow Vertical Laminar Flow with Microprocessor Control

Model		ST-3MVD	ST-4MVD	ST-5MVD	ST-6MVD
Power (W)		120W	120W	120W	120W x 2
Voltage		220V 50Hz			
Vibration		< 3um	< 3 um	< 3 um	< 3 um
Noise Level		< 56.5 dB(A)	< 56.5 dBa	< 60dB(A)	< 60dB(A)
Control System		Microprocessor			
Fluorescent Light		Intensity >1150 Lux			
Overall Dimension (W x D x H) mm		920W x 750D x 1906H	1220W x 750D x 1906H	1520W x 750D x 1906H	1820W x 750D x 1906H
Working Zone (W x D xH) mm		870W x 700D x 600H	1170W x 700D x 600H	1470W x 700D x 600H	1770W x 700D x 600H
Weight		120 kg	145 kg	180 kg	210 kg
Construction	Cabinet	Powder Coated E.G Steel			
	Sash	UV Safe Polyglass			
	Work Base	Stainless Steel AISI 304			
Digital Operating Panel	Security	User Password			
	Pre-UV Timer	Selectable Timer			
	Air Select Speed	Adjustable			
	ULPA Filter 6,000 Hours	Count Down Hour			
	UV Light 2,000 Hours	Count Down Hour			
	Real Time and Date	Yes			
Filter	Main Filter	ULPA			
	Filter Efficiency	99.9995% (0.12um-0.3um)			
	Pre-Filter	Washable			
	Arrestance	80-85%			
Air Flow System	Step 1	0.4 ±0.05 m/s			
	Inside Volume of Working Space	0.275 m3	0.415 m3	0.510 m3	0.607 m3
	Volume of Treated Air per hour	739 m3/hour	1070 m3/hour	1318 m3/hour	1581 m3/hour

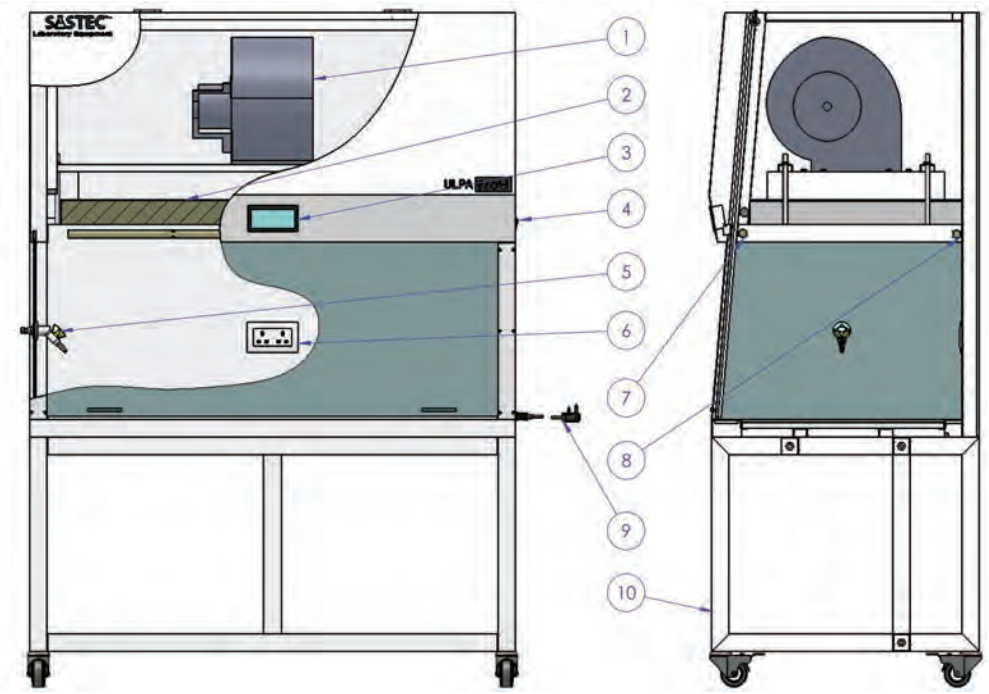
Sensor

Infrared Sensor

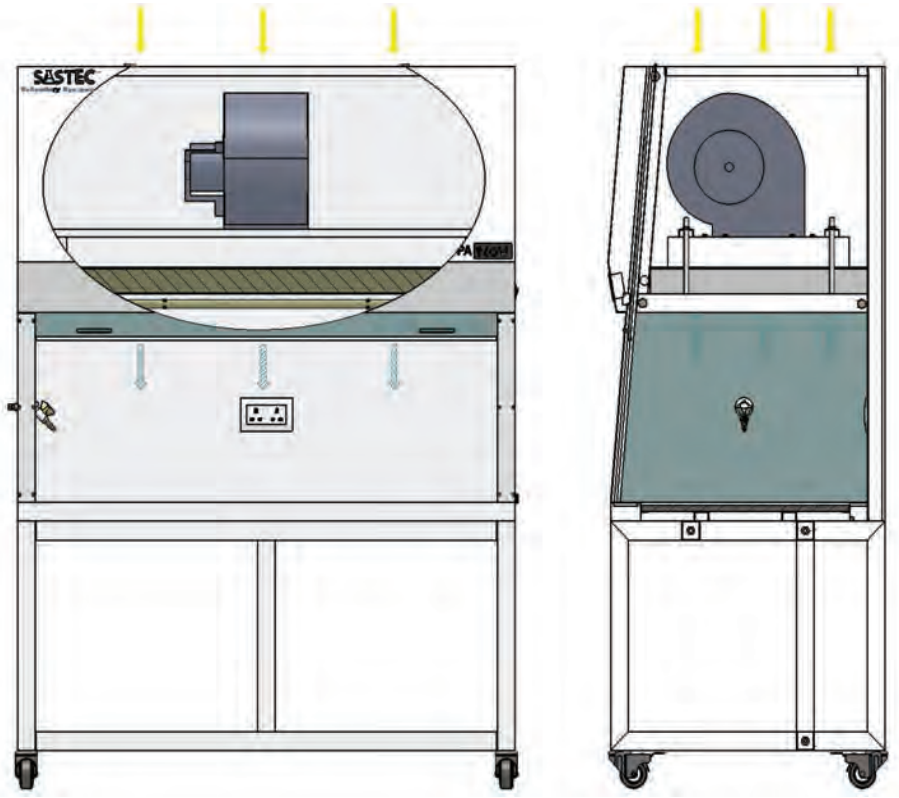
Airflow Sensor

Technical Drawing

1. BLOWER
2. ULPA FILTER
3. MICROPROCESSOR
4. ON/OFF SWITCH
5. GAS TAP
6. SOCKET OUTLET 2 GANGS
7. FLUORESCENT LIGHT
8. GERMICIDAL LIGHT
9. POWER CORD
10. FRAME C/W CASTER WHEEL

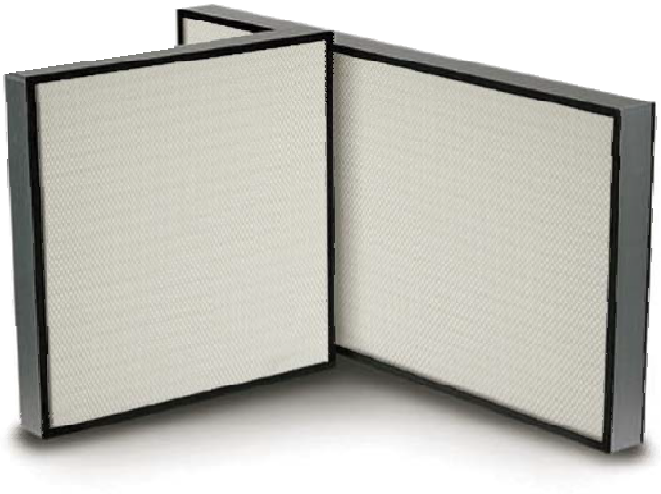


Air Flow Diagram

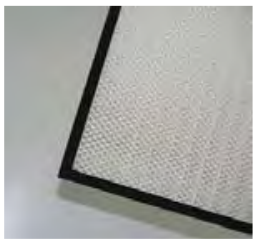


Filtration Efficiency

ULPAFlow Mini-Pleat Filter



- Mini-pleat design lowers operating costs
- Lightweight and compact
- Low off-gassing components
- Wide range of efficiencies
- Leak and/or scan tested



Neoprene Gasket
The Gasket seal frame is designed for use in clean beches

ULPA filters specially designed to meet the demanding airflow and particulate control requirements of cleanroom applications. It is available with knifeedge or gasket seal frames for installation in any type of grid system or frame.

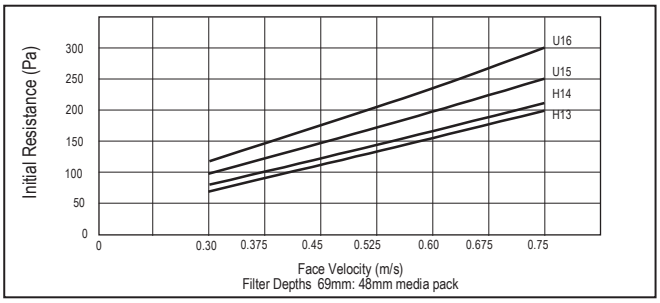
meeting the classifications ranging from H13 to U17 in accordance with EN1822

ULPAFlow Mini-Pleat Filter are designed for use in cleanrooms, clean benches, semiconductor, pharmaceutical, biotech, food processing, and other industries in which airborne contaminants must be carefully controlled.

The mini-pleat design combines maximum efficiency with low pressure drop, thus reducing operating costs.

Special thermoplastic heads are used to maintain equal spacing between pleats for optimal airflow, resulting in high dust holding capacity and full use of the entire depth of the filter.

Initial Resistance vs Face Velocity



All ULPA filters are leak tested and ULPA filters are scanned with a laser spectrometer with PSL particles to determine the overall efficiency in accordance with IES-RP-CCO34-1.