### AstroFan FFU

Self-contained Fan Filter Unit

- Self-contained stainless steel fan filter unit
- Low off-gassing components
- Speed control
- Low energy consumption reduces operating costs
- High total static pressure at full air flow
- Easy installation in cleanroom grids
- Low noise level

The AAF AstroFan Fan Filter Unit (FFU) is a self-contained ceiling unit for use in turbulent mixing and laminar flow cleanroom applications. The unit is designed with total flexibility for use with the AAF 50mm T-Bar ceiling grid, AstroDry HD ceiling grid, and other compatible grids. When the filter is executed with knife-edge, the unit can also be utilized in the AstroGel ND liquid-seal ceiling grid. It can be easily upgraded and integrated into any ceiling configuration in accordance with design specifications to achieve cleanroom Class 100 to Class 1.

The AstroFan FFU is one of the quietest and cost effective units on the market, that delivers high quality air filtration and air movement performance in cleanrooms.

It is suitable for semiconductor, electronics, flat panel and disk drive manufacturing, optical, biological industries and other applications where airborne contaminants must be carefully controlled.



# Self-Contained Stainless Steel Fan Filter Unit

AstroFan FFU is comprised of a stainless steel housing with a high performance, encapsulated, direct driven backward curved fan/motor combination, and a replaceable AAF AstroCel® II HEPA (99.999% efficiency on 0.3 μm) or ULPA (99.9995% on 0.12 μm) filter. Each filter is factory scanned and guaranteed performance to ensure leak free operation. Optional inlet collar is available.

The stainless steel housing provides sturdy construction, which virtually eliminates bypass leakage and resists damage during shipping and handling. It can be sterilized with disinfectant, making it highly suitable for sterile applications. Color bond steel and aluminum housings are optional.

### **Low Off-Gassing Components**

All components are low off-gassing to meet stringent requirements of specific industries.

### **Speed Control**

A solid-state speed controller is mounted on top of the unit as standard for single phase motor.

### Low Energy Consumption Reduces Operating Costs

The AstroFan FFU comes with a single phase or optional 3-phase high efficiency, low maintenance, long life AC motor. Optional Variable Speed Control and Electrical Commutated (EC) motor are available. The EC motor technology helps to reduce power consumption and cooling load of the FFU, thus reducing total operating cost.

# High Total Static Pressure At Full Airflow

The low-pressure drop of the AstroCel® II filter, in combination with the high total static pressure of the fan, provides an external static pressure of 50 to 100 Pa at full rated airflow. It allows for additional attachment of an optional prefilter.

## Easy Installation In Cleanroom Grids

The AstroFan FFU is designed to be easily set in place on ceiling grids without any hold-down clamping.

Room Side Replaceable (RSR) feature is available with an optional adapter panel, for quick and easy filter replacement.





### **AstroFan FFU**

### **Specifications**

Standard

Dimension (WxDxH) : 570mm x 1170mm x 295mm

Power source : 230/1Ø/50Hz or 60Hz

Power consumption : 140W

Housing : Stainless Steel SS430

Weight : 35kg

Filter : AstroCel® II (HEPA Filter - 99.999% efficiency on 0.3 μm particles)

Options : 415/3Ø/50Hz OR 380/3Ø/60Hz

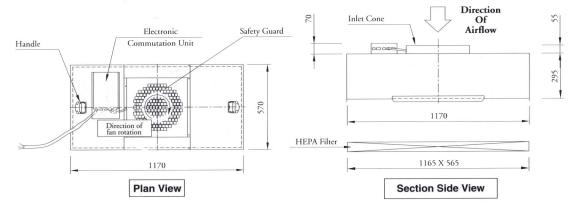
ULPA Filters (99.9995% efficiency on 0.12 µm particles)

Color Bond Steel and Aluminium Housing

Variable Speed Control

EC System (Electrical Commutated)

Adapter Panel Inlet Collar Prefilter

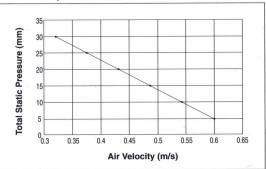


### **Product Information**

Nominal	
Airflow	17m³/min
Average Face Velocity	0.45 m/s
Filter Pressure Drop	120 Pa
External Static Pressure	50Pa - 100 Pa
Noise Level	51 dBA - 55 dBA

Note: Other sizes and arrangements available upon request.

### Air Velocity Vs Total Static Pressure



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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.