

Fan Filter Unit

FFU



Applications



Semiconductor



Cleanroom



Pharmaceutical
& Laboratories



Food Processing
Industry

Product Features

Casing Construction

Material: Galvalume / stainless steel / aluminium



Optional Accessories

Air inlet prefilter, downstream diffuser, pressure gauge, pressure gauge port for filter pressure drop monitoring, cleanliness monitoring port, DOP testing port, air inlet collar, five-speed controller, humidity monitoring port, remote control, European plug and others



Uniform Air Flow Distribution



Low Energy Consumption

High efficiency blower



Low Noise Level

High total static pressure



Speed Controller

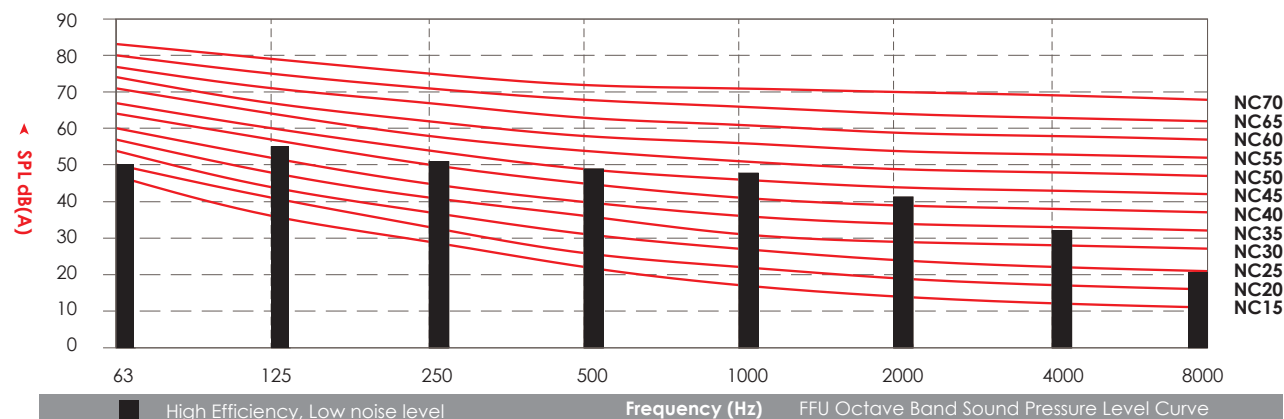
Type: None / manual speed controller / small scale centralized speed controller



Clean Air • Our Future
www.mayairgroup.com

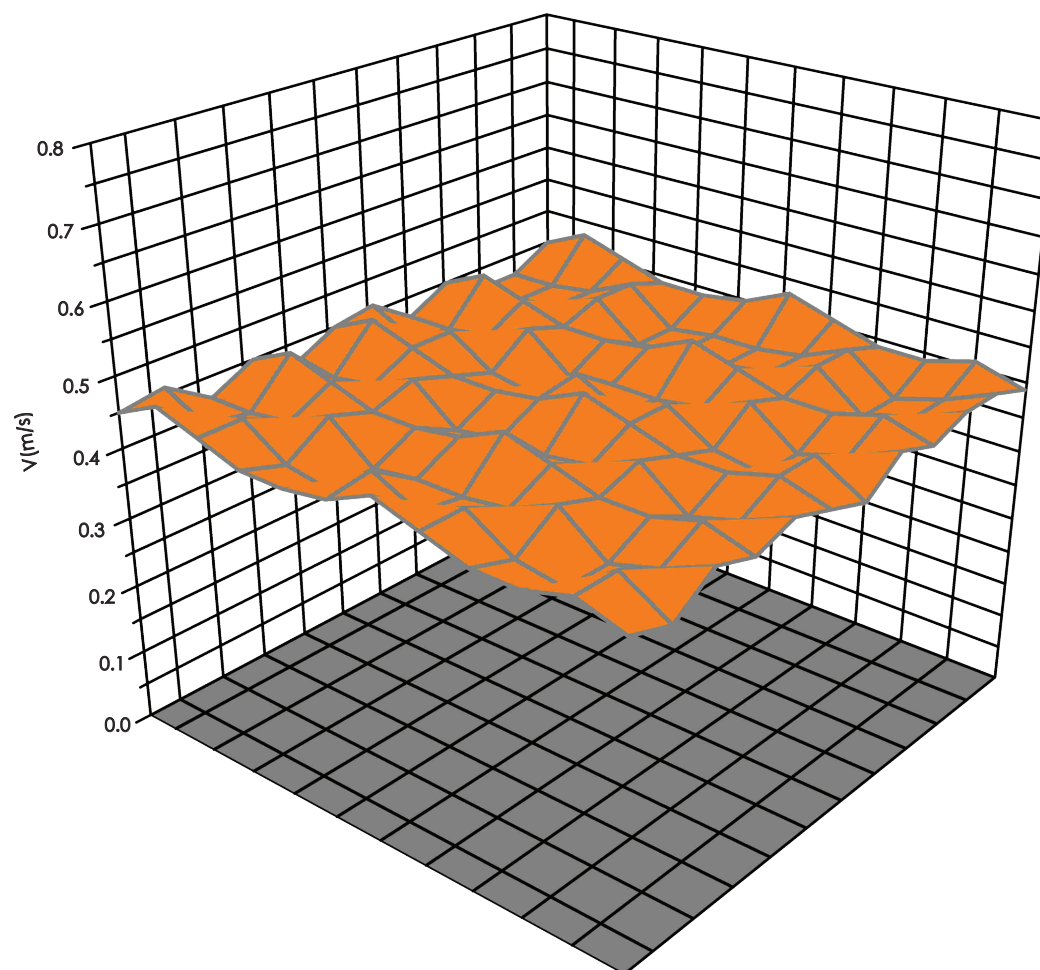


FFU Sound Pressure Level Curve (Octave Band)



Uniformity of Air Distribution

Ensure the deviation of face velocity is within $\pm 10\%$



▲ Air Velocity Distribution 3D Diagram

AC Motor Technical Data				Power Input: 1 Φ 220V - 240V 50Hz
Series	F-22AL	F-23AL	F-24AM	
WxL (mm)	600x600/575x575	600x900/575x875	600x1200/575x1175	
H (mm)	250	250	275	
Air Velocity (m/s)	0.45	0.45	0.45	
Static Pressure (Pa)	250	220	310	
Power Consumption (W)	80	110	155	
Noise Level dB(A)	50	51	53	
Vibration Level (mm/s)	0.7	0.8	1.2	

Series	F-34AM	F-34AH	F-44AM1	F-44AH
WxL (mm)	900x1200/875x1175		1200x1200/1175x1175	
H (mm)	275	275	275	275
Air Velocity (m/s)	0.45	0.45	0.45	0.45
Static Pressure (Pa)	250	275	205	285
Power Consumption (W)	175	225	245	305
Noise Level dB(A)	53.5	53	55	53.5
Vibration Level (mm/s)	1.2	1.2	1.3	1.4

EC Motor Technical Data					Power Input: 1 Φ 200V - 277V 50Hz
Series	F-22EL	F-23EL	F-24EL	F-24EM	
WxL(mm)	600x600/575x575	600x900/575x875	600x1200/575x1175		
H(mm)	250	250	250	275	
Air Velocity (m/s)	0.45	0.45	0.45	0.45	
Static Pressure (Pa)	270	250	210	415	
Power Consumption (W)	55	70	85	90	
Noise Level dB(A)	49	50.5	51.5	51	
Vibration Level (mm/s)	0.7	0.8	1.2	1.2	

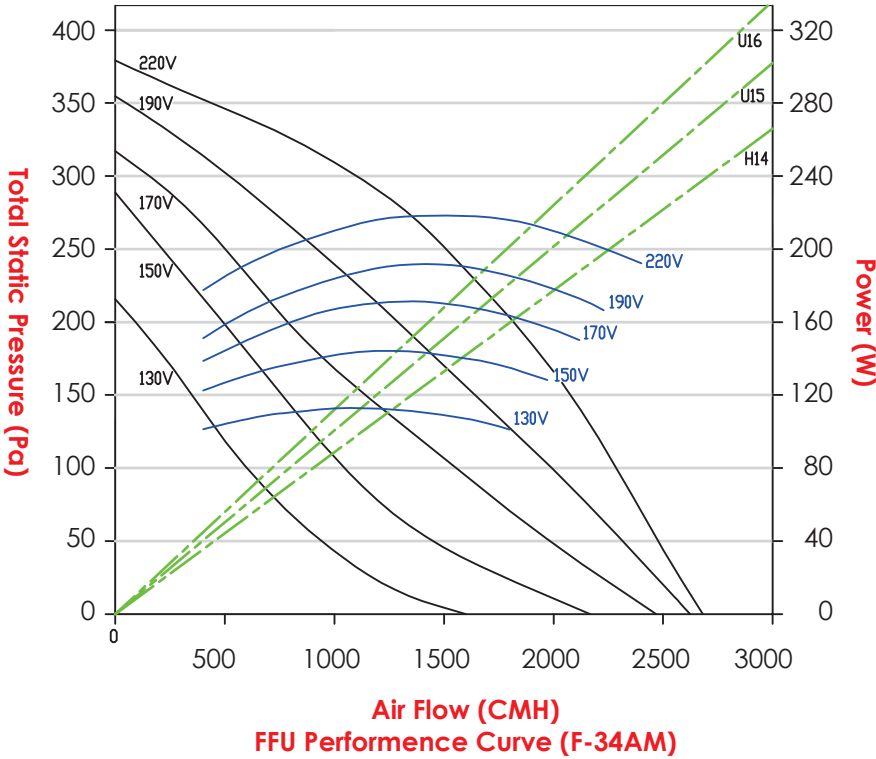
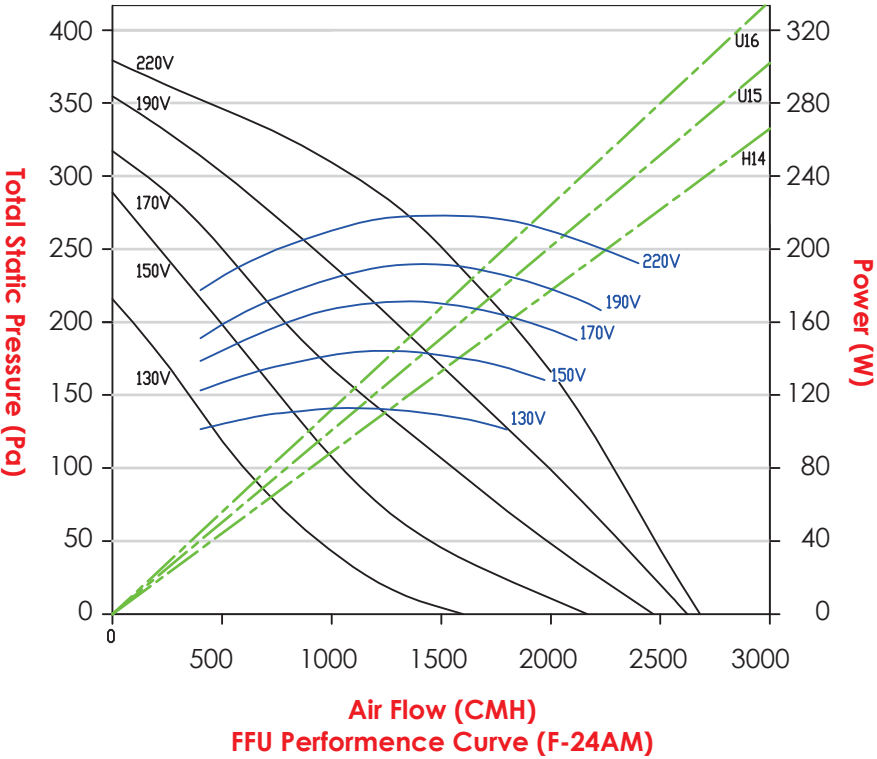
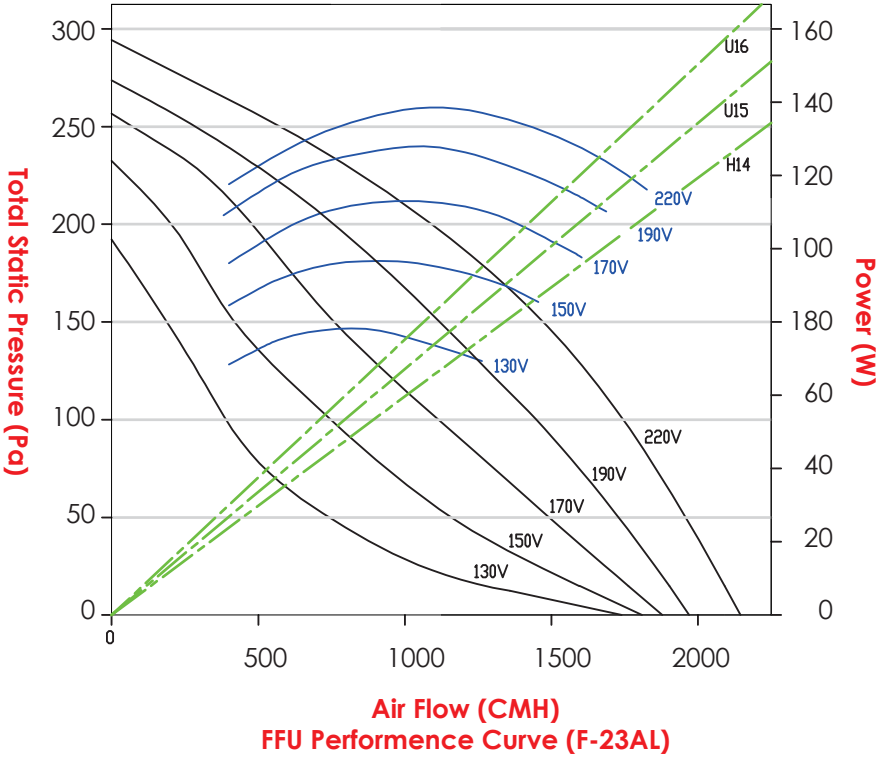
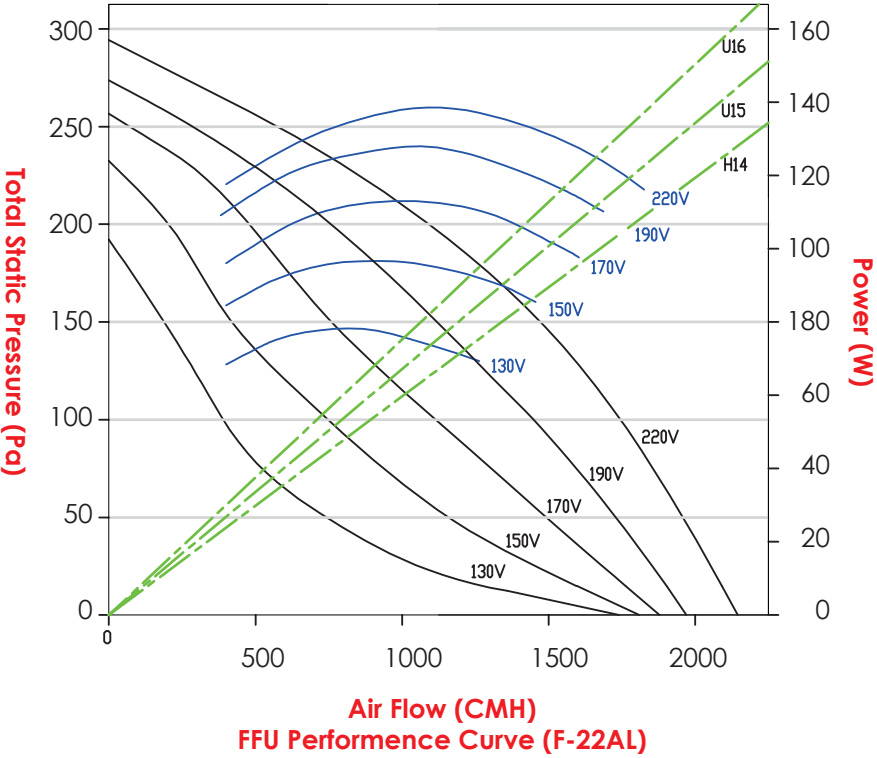
Series	F-34EM	F-34EH	F-44EH
WxL (mm)	900x1200/875x1175		1200x1200/1175x1175
H (mm)	275	275	275
Air Velocity (m/s)	0.45	0.45	0.45
Static Pressure (Pa)	320	430	360
Power Consumption (W)	120	125	180
Noise Level dB(A)	53	52.5	53.5
Vibration Level (mm/s)	1.2	1.2	1.4

Remarks: 1. Test point of noise is 1.5m below filter downstream.
2. Test point of air velocity is 0.15m below the filter.
3. FFU sizes can be customised upon request.
4. FFU power consumption in above tables is based on FFU initial performance.

Fan Filter Unit
FFU Performance Curves

FFU

AC Motor

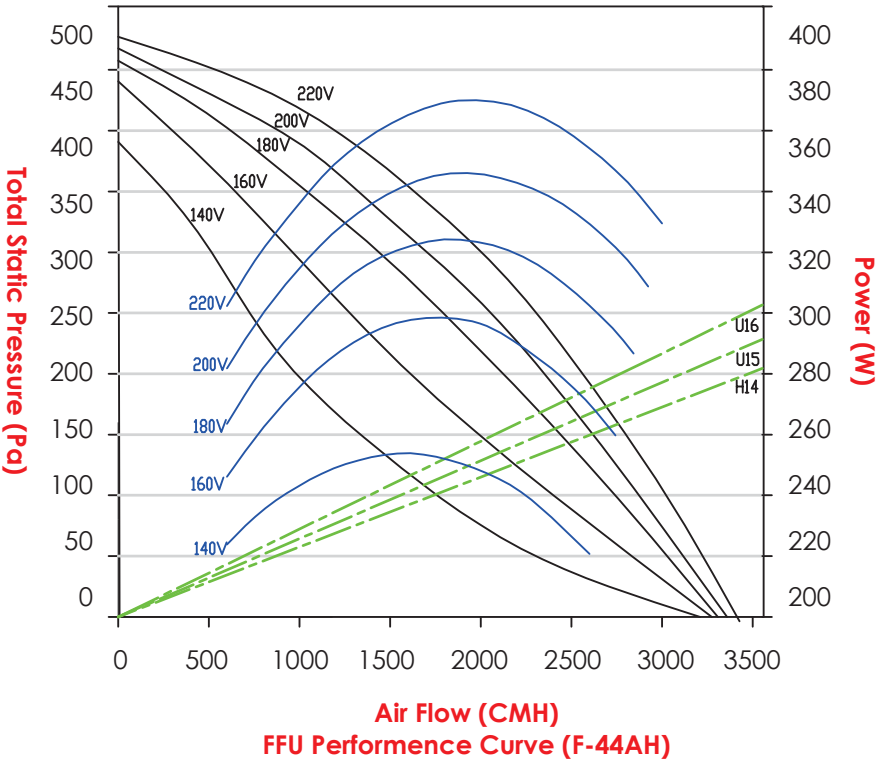
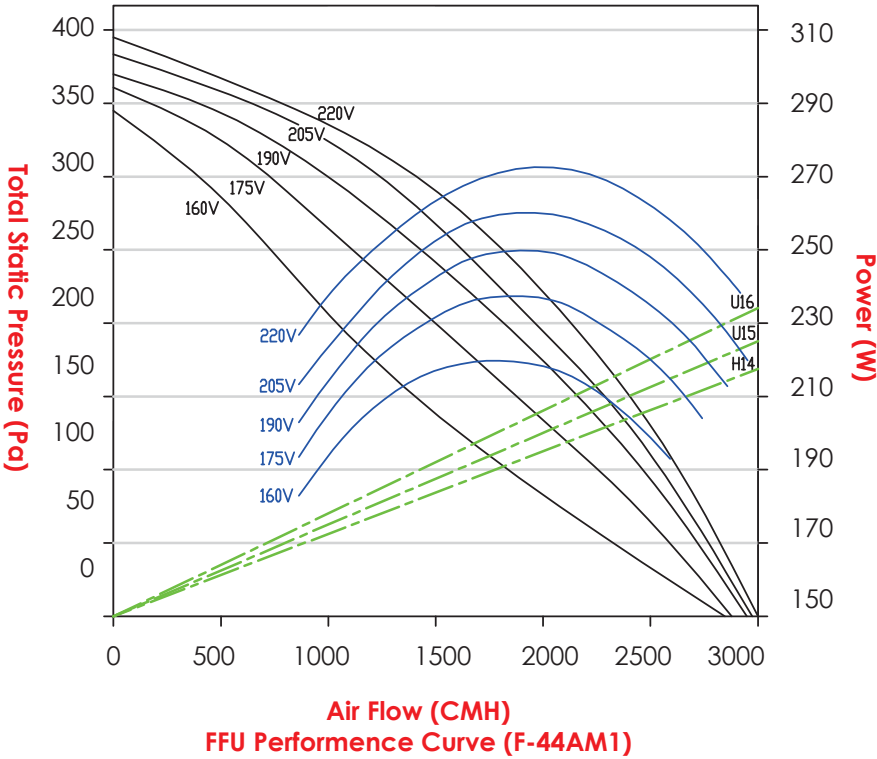
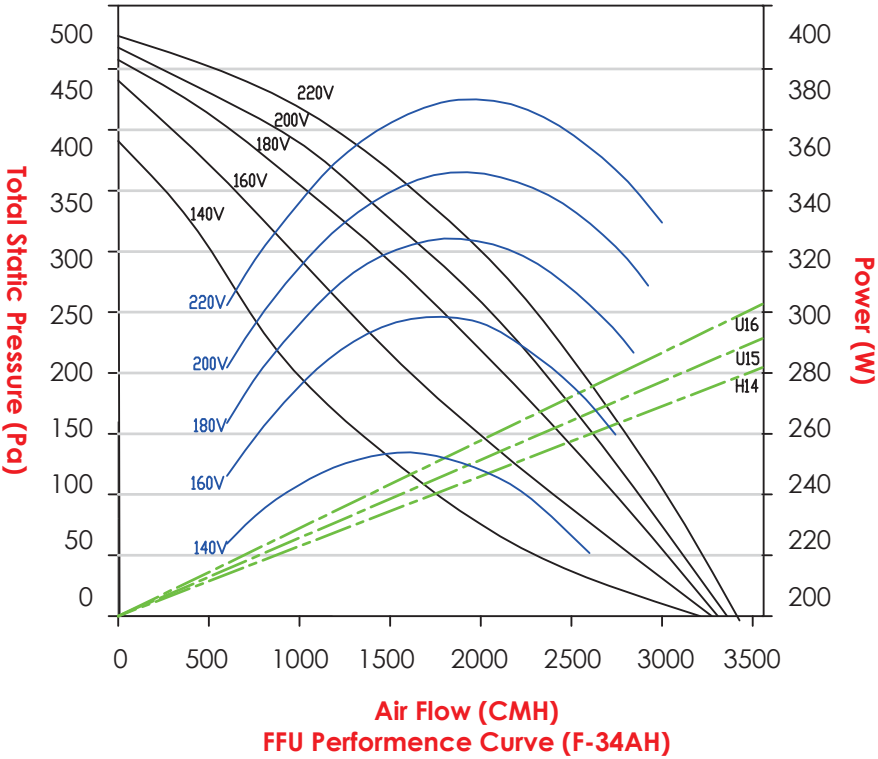


— Total Static Pressure - Air Flow curve — Power - Air Flow curve - - - HEPA/ULPA filter initial pressure drop - Air Flow curve (Thickness: 70mm)

Fan Filter Unit
FFU Performance Curves

FFU

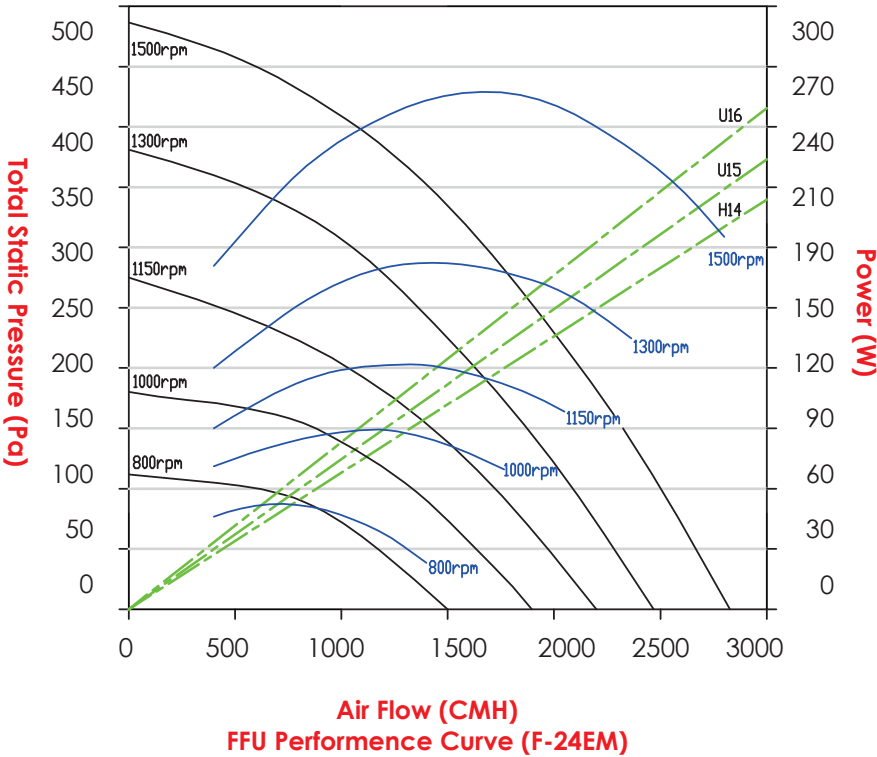
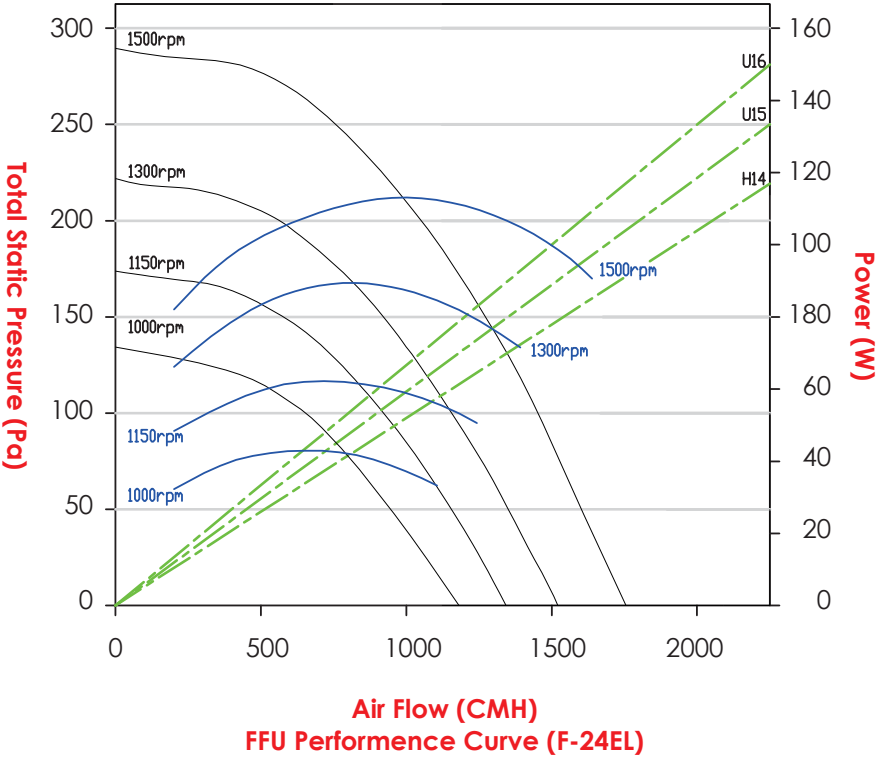
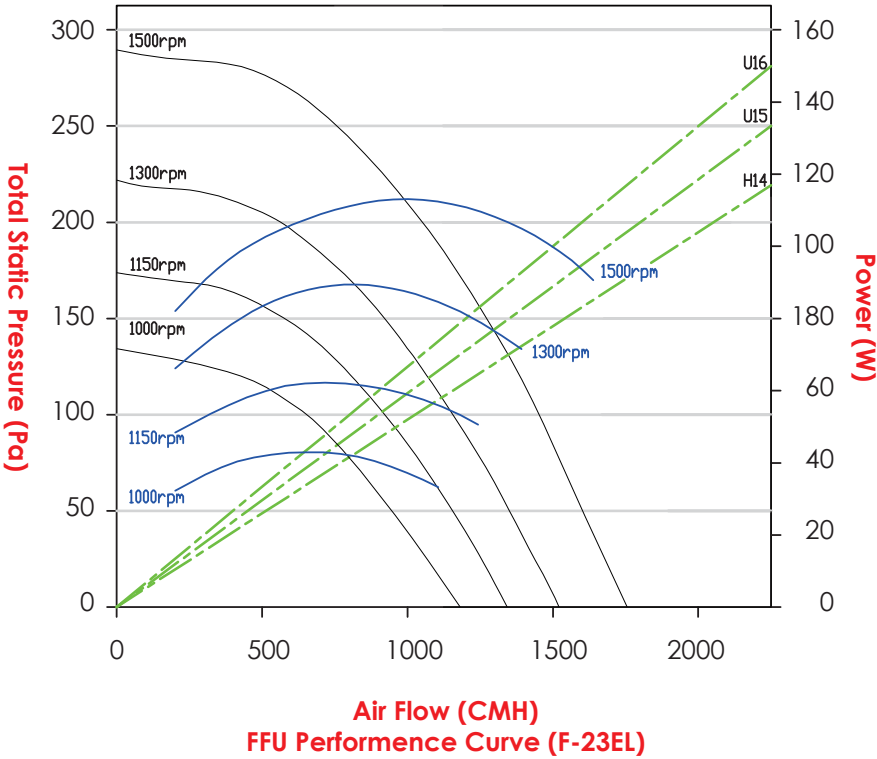
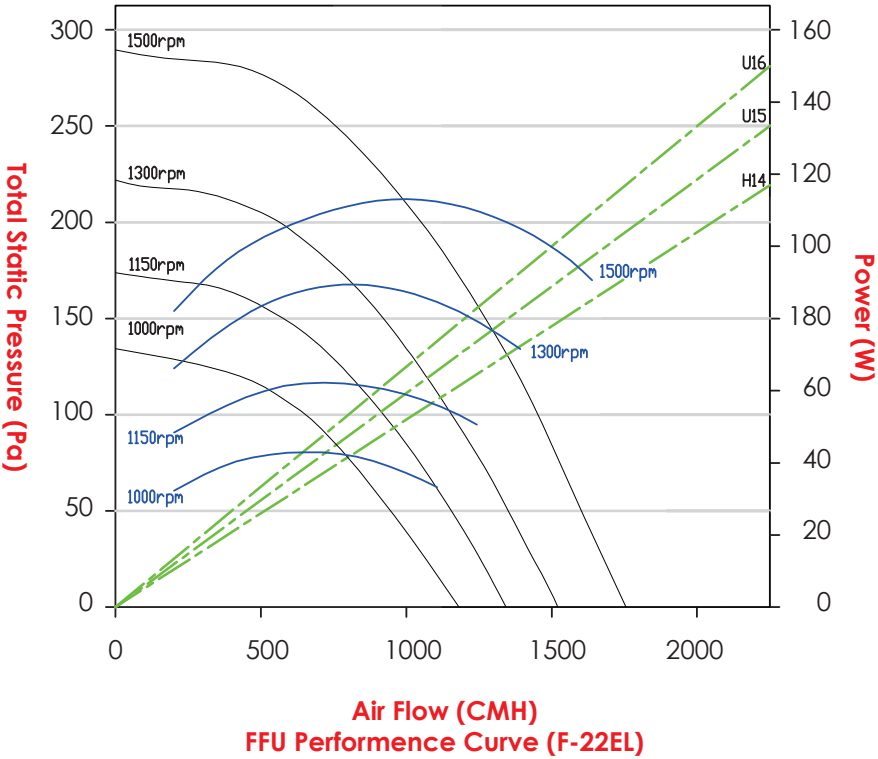
AC Motor



— Total Static Pressure - Air Flow curve — Power - Air Flow curve - - - HEPA/ULPA filter initial pressure drop - Air Flow curve (Thickness: 70mm)

FFU

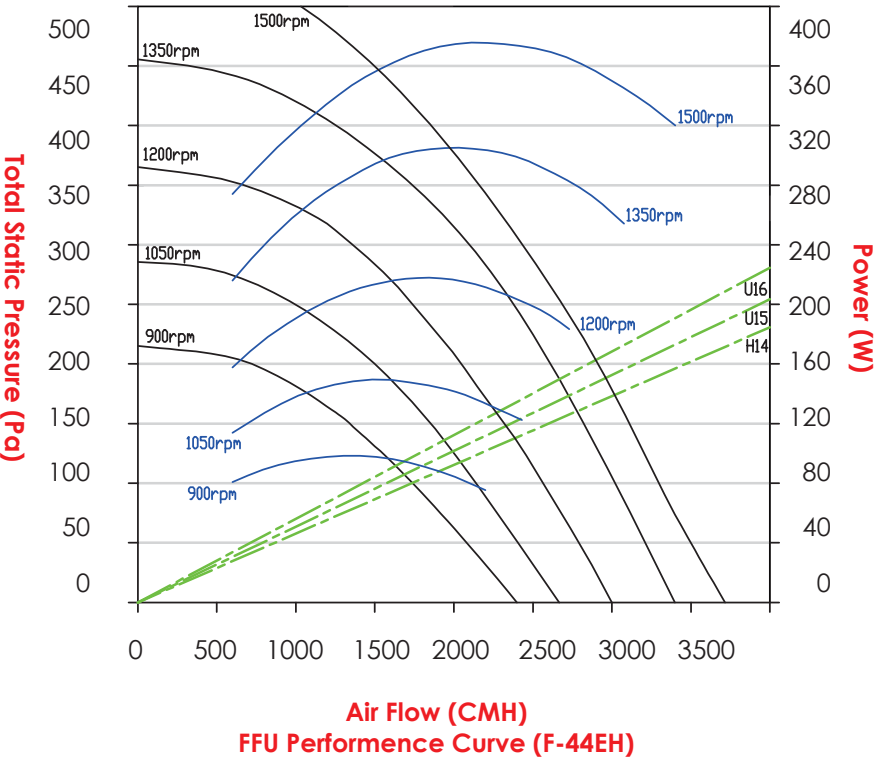
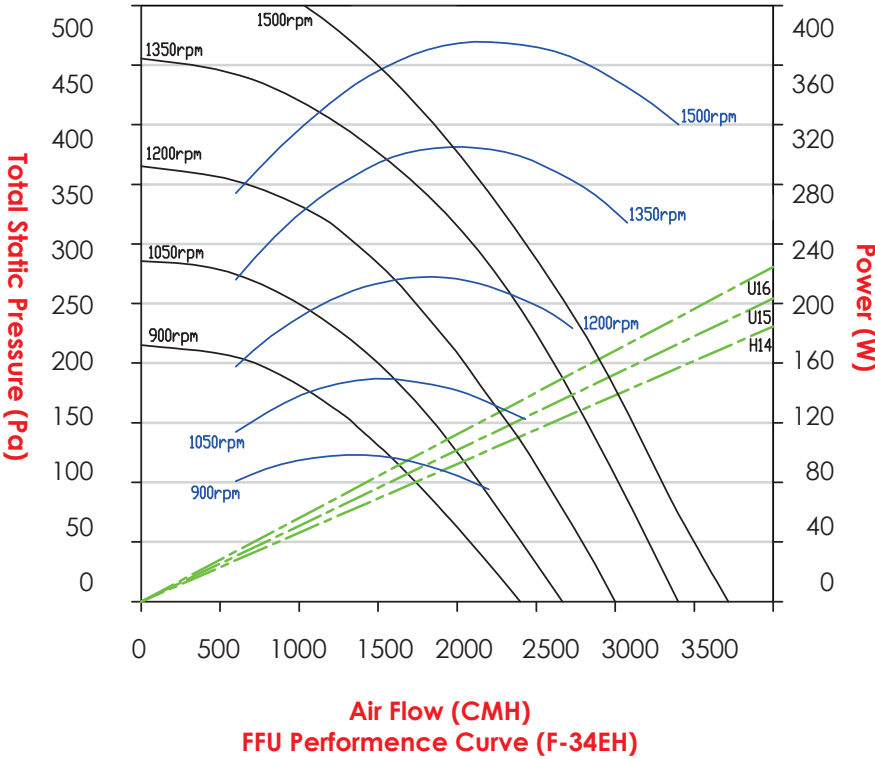
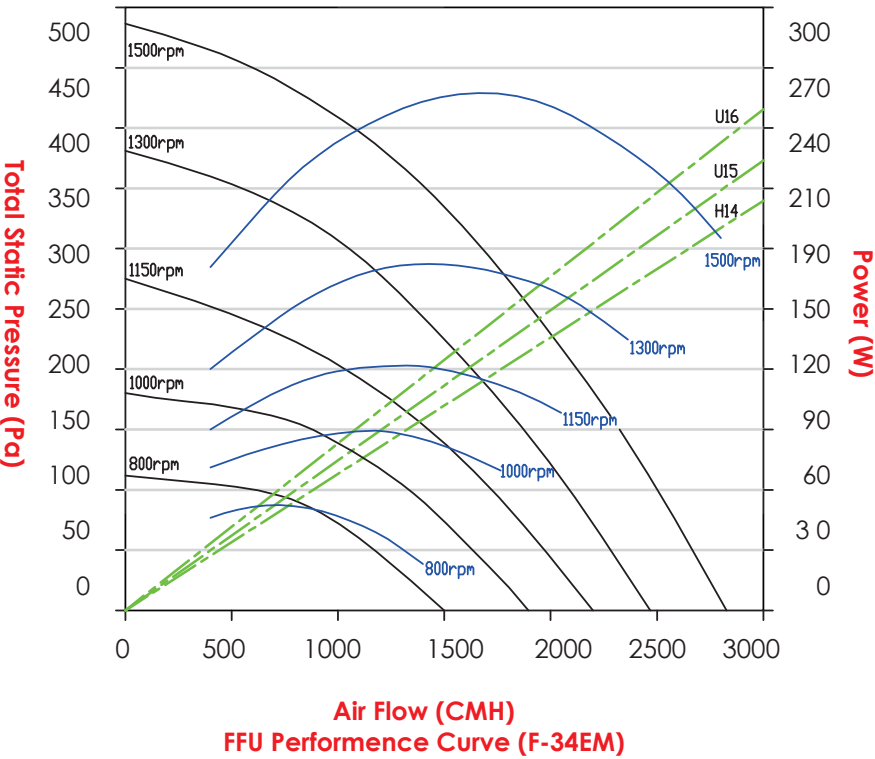
EC Motor



— Total Static Pressure - Air Flow curve — Power - Air Flow curve - - - HEPA/ULPA filter initial pressure drop - Air Flow curve (Thickness: 70mm)

FFU

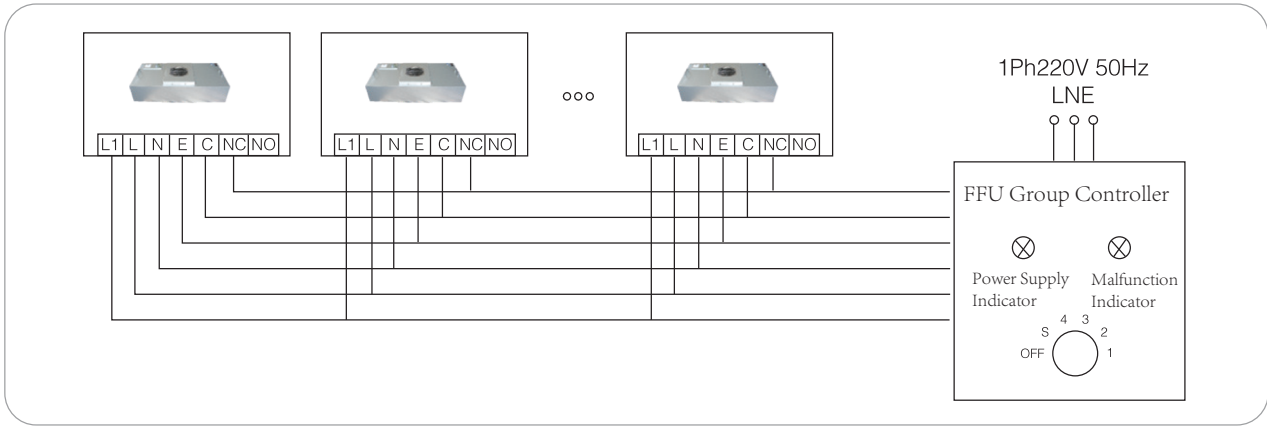
EC Motor



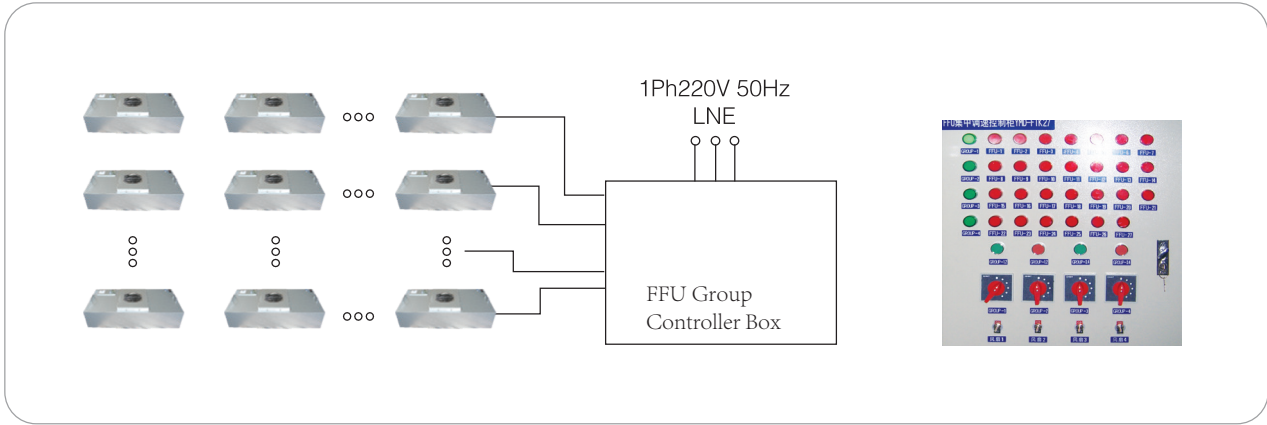
— Total Static Pressure - Air Flow curve — Power - Air Flow curve - - - HEPA/ULPA filter initial pressure drop - Air Flow curve (Thickness: 70mm)

FFU

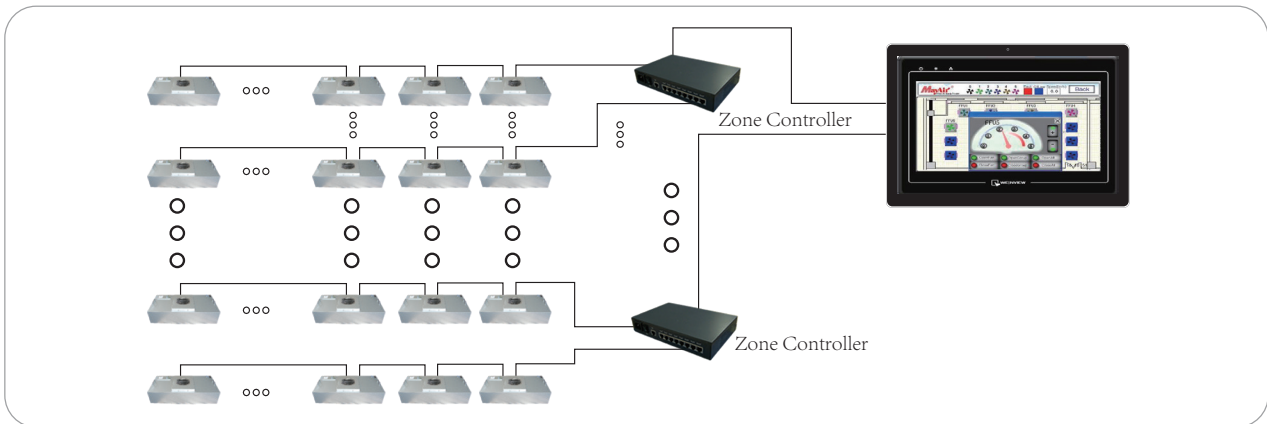
Group Controller



Multiple FFU Group Controller



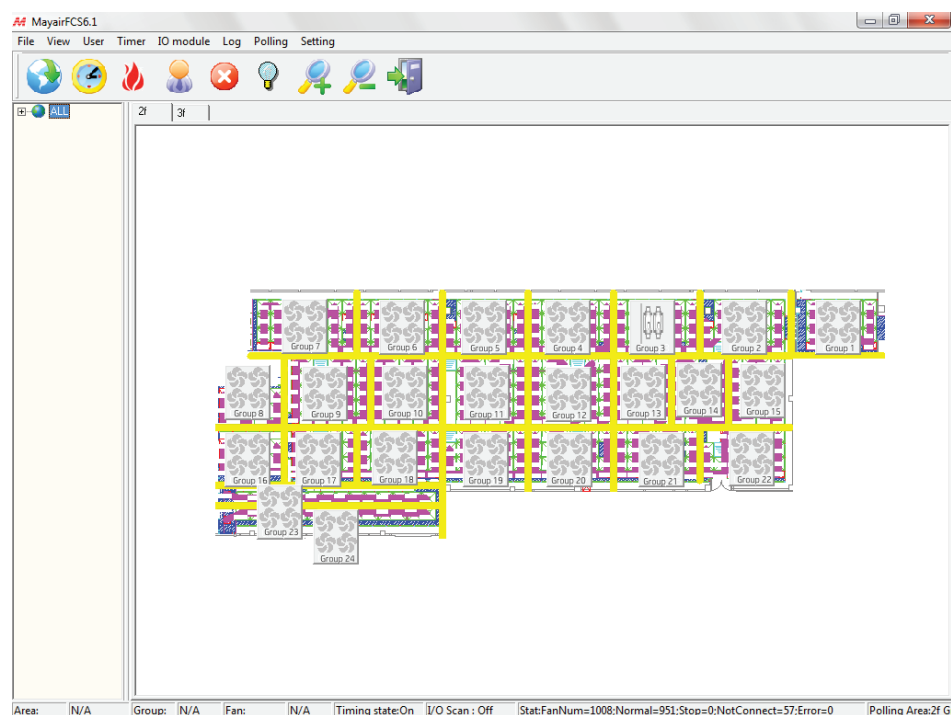
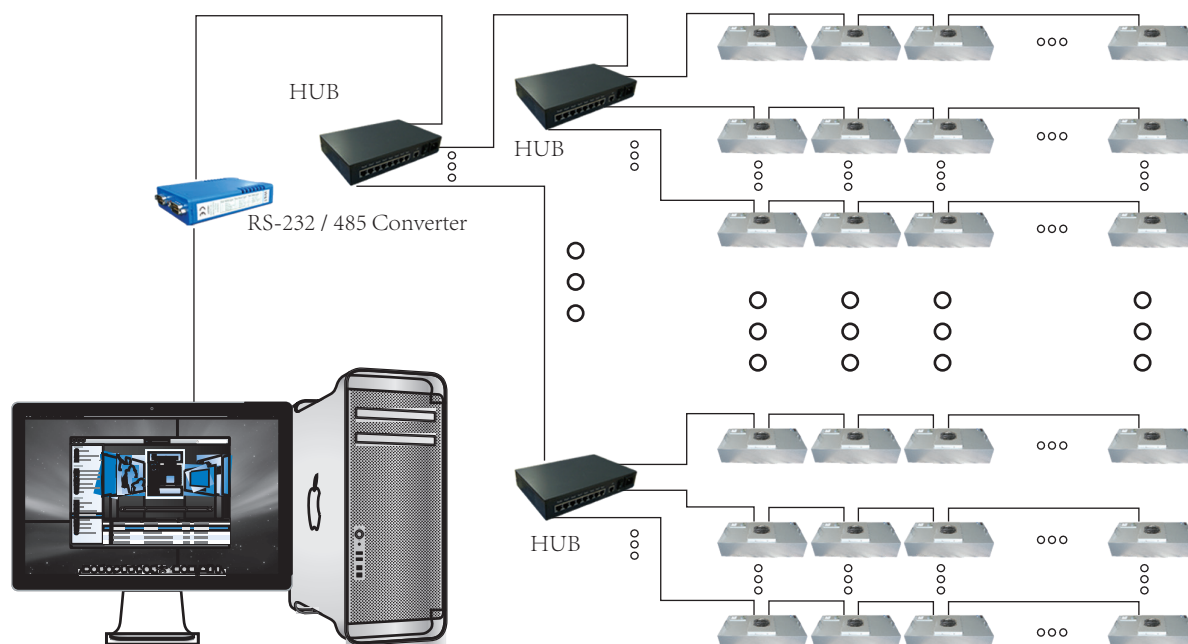
Multiple FFU Touch Screen Control



Product Features

- Reliable FFU alternating current control system.
- Group or single unit alarm indicator.
- 3-stage or 5-stage fan speed controller.
- Over-current protection.
- RS-485 communication mode can perform remote control on the systems.

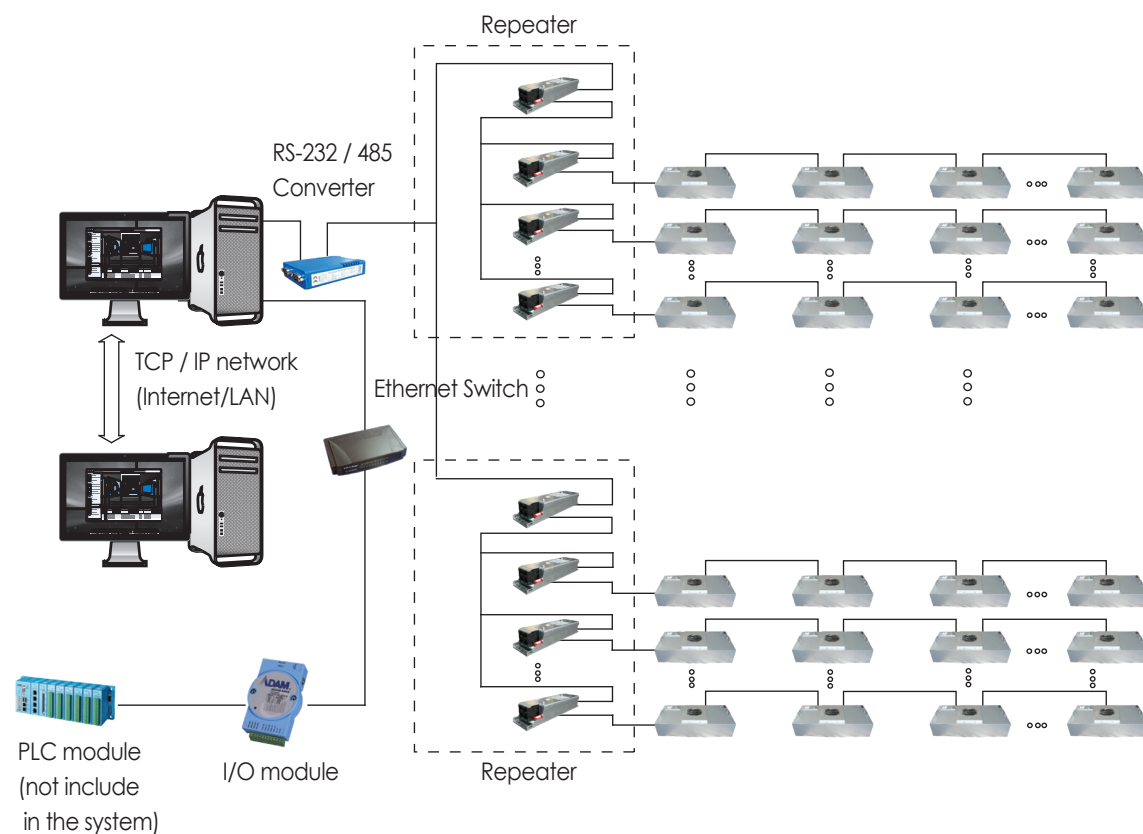
MayAir FCS AC FFU Group Control System



Product Features

- Overcomes large-scale FFU alternating current control problem with comprehensive functions.
- Multiple working areas/zones group control allows FFU that are distributed at different floors or different locations to be controlled according to working area/zone. It also allows FFU in same working area/zone but located in different room to be controlled according to group.
- RS-485 communication module, integrated hardware installation, system low investment and easy installation.
- Centralised control of FFU's initiation, stop, fan speed and timing. Operation of the system is simple and energy saving.
- Auto display of fan speed and FFU malfunction indicator allow accurate positioning of FFU and diagnose the fault message.
- Auto initialisation of FFU by group sequence prevents power supply disruption due to large-scale system being initiated synchronously at the same time.
- 4-stage password control system allows a comprehensive and easy management of user.
- User-friendly system incorporated with multiple languages such as English, simplified Chinese and traditional Chinese, suitable for users from different countries and regions.
- FFU initiation utilizes low current, thus prevents power supply disruption.

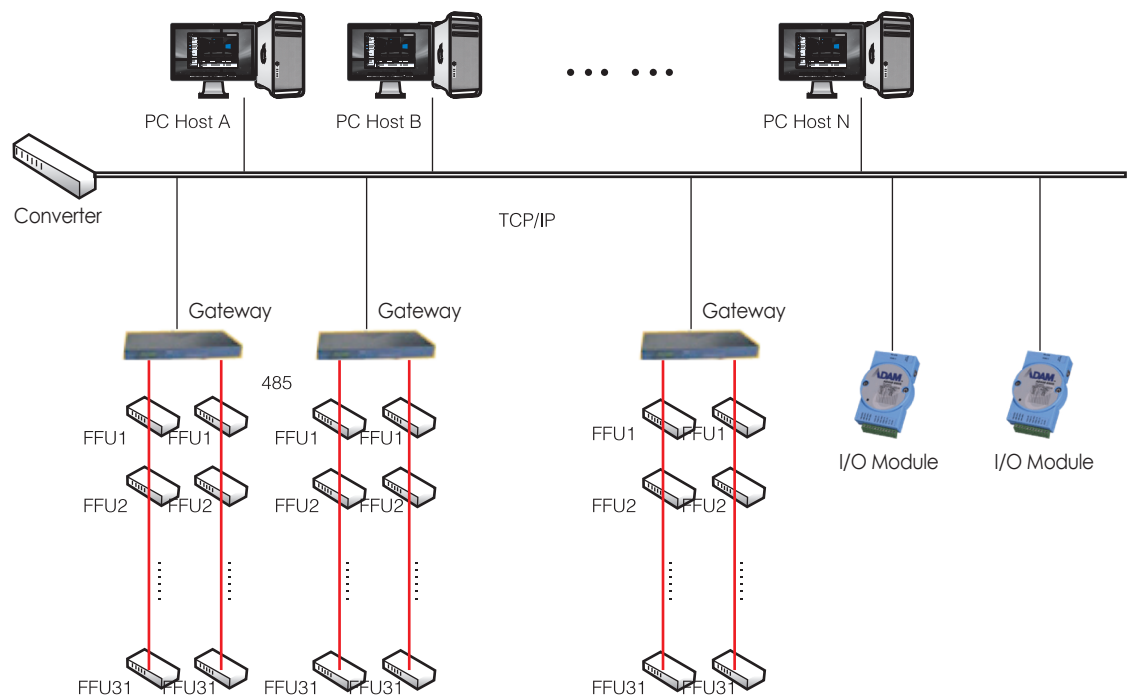
MayAir EFCS EC FFU Group Control System



Product Features

- Multiple working areas/zones group control allows FFU that are distributed at different floors or different locations to be controlled according to working area/zone. It also allows FFU in same working area/zone but located in different room to be controlled according to group.
- RS-485 communication module, integrated hardware installation, system low investment and easy installation.
- Centralised control of FFU's initiation, stop, fan speed and timing. Operation of the system is simple and energy saving.
- Can operate together with user's fire alarm system by synchronising fire alarm grouping with FFU grouping. This allows FFU to slow down or cease operation according to the fire alarm signal.
- Upon receiving of fire alarm signal, the system will alarm via sound and light system.
- Auto display of fan speed and FFU malfunction indicator allow accurate positioning of FFU and diagnose the fault message.
- User can monitor FFU through internet or intranet.
- 4-stage password control system allows a comprehensive and easy management of user.
- User-friendly system incorporated with multiple languages such as English, simplified Chinese and traditional Chinese, suitable for users from different countries and regions.
- FFU initiation utilizes low current, thus prevents power supply disruption.

MayAir FLONET Direct Current FFU Group Control System



Product Features

- High control capacity
Able to perform real-time monitoring and control 50,000 units FFU.
- Short response time.
- Convenient installation through ID registration.
- Remote control of MayAir FLONET system.
- OPC communication protocol.
- Optional email service function.
- Difference color display feature to indicate the FFU working condition.
- Able to perform individual room, area and all FFU control. This control is done by feature shown in software as individual/ port/ server/ all FFU.
- Mouseover function on FFU for speed and exact address display.
- Operating and error log can be recorded by the system.
- Able to indicate individual FFU power consumption.
- Perform real-time statistic of FFU condition for the whole system.
- Timer setting function in MayAir FLONET
Able to set FFU operation according to the working hours in factory.
- 3 level of authorities:
Administrator, operator and guest for high security.

FFU

