

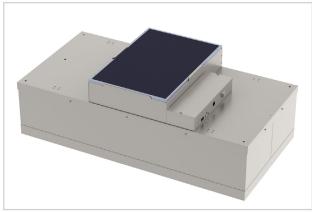
## FFDE / FFDB / FFDER / FFDBR / FFDERA / FFDBRA / FFDERAC / FFDBRAC

# Fan Filter Diffusers

### Fan Filter Diffusers

- Low profile design
- PSC or ECM motor
- Forward curved or backward curved fan
- Solid state, visual, or infrared speed control
- Walkable plenum (excluding prefilter)
- UL listed (120V, 277V)
- Standard sizes: 24" x 24" and 48" x 24"
- Aluminum construction (stainless steel optional)
- Options: Duct collar, challenge port, ULPA filter, power cord

# critical environment diffusers



FAN FILTER DIFFUSERS



#### MODELS:

FFD / PSC motor / HEPA Filter

FFDR / PSC motor / Room side replaceable HEPA filter FFDRA / Room side replaceable PSC motor & HEPA filter FFE / ECM motor / HEPA filter FFDER / ECM motor / Room side replaceable HEPA filter FFDERA / Room side replaceable ECM motor & HEPA filter FFDERAC / Room side replaceable ECM motor, HEPA filter FFDBR / ECM motor with backward curved fan / HEPA filter FFDBR / ECM motor with backward curved fan / Room side replaceable HEPA filter FFDBRA / Room side replaceable ECM motor with backward curved fan & HEPA filter FFDBRAC / Room side replaceable ECM motor with backward curved fan, HEPA filter & controls FFDL / PSC motor - low energy / HEPA filter FEDLPA / RSC motor - low energy / HEPA filter

FFDLRA / PSC motor - low energy / Room side replaceable HEPA filter FFDXS / AC motor / HEPA filter

FFDXSR / AC motor / Room side replaceable HEPA filter

### OVERVIEW

Fan filter diffusers provide a unique solution in cleanroom applications. In situations where the use of conventional ducted modules is impractical or the air supply has insufficient static pressure to move the air through a HEPA filter, fan filter diffusers provide an excellent alternative. In cleanroom design, the primary factor is contaminant removal and the cleanliness level, so moving the air is a major challenge. The volume of recirculated HEPA filtered air, including conditioned air to handle high cooling loads that are typical of many cleanrooms, can range from less than twenty to more than five hundred air changes per hour. Fan filter diffusers provide a constant flow of clean air into the space which prevents the infiltration of contaminants and provides for the removal of particles generated by people and equipment in the work space.



Titus offers a complete line of fan filter diffusers that can be used for new design or retrofitting cleanroom environments. Each Titus FFD (fan filter diffuser) is a self-contained fan filter module that includes HEPA filter, pre-filter, fan speed control and low profile design. Air circulation is maintained by using a lightweight, forward curved fan powered by a 120V or 277V, 60Hz motor. Motor speed is adjusted by the solid-state speed control mounted on top of the housing. Patented baffling technology ensures uniform airflow across the filter face and attenuates sound for one of the quietest fan filter diffusers in the industry. The room side replaceable option (R) provides quick and efficient replacement of the HEPA or ULPA filter from room side while the diffuser remains in place. The room side replaceable option (RA) allows for replacement of the motor and filter from the room side.

Titus fan filter diffusers are also available with an ECM brushless DC motor. These units dynamically adjust themselves to maintain the set airflow, compensating for changes in static pressure, filter loading or other local conditions. Titus fan filter diffusers with ECM can easily maintain cleanroom air levels exceeding IEST recommended practices. Airflow is maintained so constantly and consistently that the need for future balancing is greatly reduced. The ECM option, along with the patented baffling system and forward curve fan, makes Titus fan filter diffusers intelligent, energy efficient and ultra quiet.