

## PRODUCT OVERVIEW

- Available in 99.99% and 99.9995% efficiencies
- Motor voltages 120v, 230v, and 277v available
- Maybe be Roomside Replaceable or Non-Ceiling Replaceable
- Ideal for use in
  - Cleanroom Mini Environments
  - Soft Wall Cleanrooms
  - Compounding Pharmacies
  - USP 797 Compliance
  - Critical Environments
- Available options
  - Ducted inlet with slide out pre-filter
  - Power cord
  - Motor running indicator light
  - Various face grille materials
  - Flow thru lighting



## SENTINEL FAN POWERED TERMINAL MODULE

### WHY THE SENTINEL FAN UNIT?

- The Sentinel Fan Filter Unit is designed for optimum performance and energy savings
- The unit operates at 185 watts, with a low noise level of 54 dBA and 14.5" low profile
- External static capability at 90 ft/min with HEPA filter, 0.56"w.g. (STD) 0.68"w.g. (RSR)
- On/Off toggle switch and solid state speed control standard on all units
- Epoxy painted white blower plenum
- Roomside replaceable units filter section is epoxy painted white with a polystyrene white egg-crate grille
- Non-ceiling replaceable unit filters have white expanded steel screen and are tex screwed to the blower plenum. Filter replacement can be accomplished by removing the assembly from the ceiling grid system
- Units are furnished with a 20x20x1 MERV 8 Pre-filter or a round duct collar (excludes pre-filter)



# SENTINEL FAN POWERED TERMINAL MODULE

## PERFORMANCE DATA

SIZE	STYLE	FILTER SIZE	AIR VELOCITY (fpm)	AIRFLOW (cfm)	INTERNAL STATIC (in. W.G.)	NOTES
2 x 2	STD	23.625 x 23.625	90	290	0.52	Values reflect unit with pre-filter and HEPA with no additional static pressure drop.
			100	325	0.58	
			115	375	0.66	
2 x 2	RSR	20.625 x 20.625	90	240	0.50	External SP is average and may vary by +/- 5%
			100	265	0.56	
			115	305	0.95	
2 x 4	STD	23.625 x 47.625	90	615	0.52	<b>STD</b> - Standard lay-in unit, non-roomside serviceable HEPA filter.
			100	685	0.58	
			115	800	0.66	
2 x 4	RSR	20.625 x 44.625	90	535	0.50	<b>RSR</b> - Roomsideserviceable HEPA filter with Gel Seal.
			100	595	0.56	
			115	685	0.66	

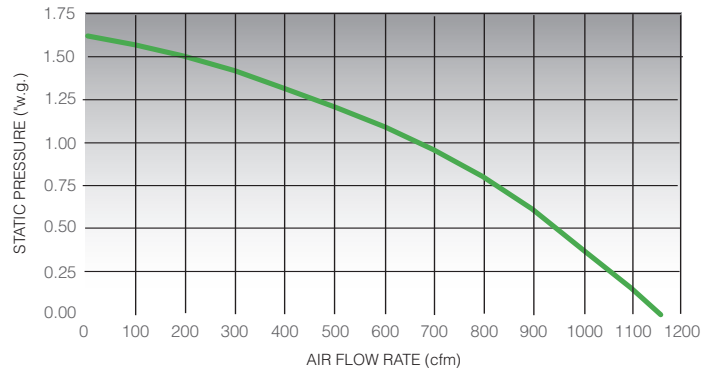
## MOTOR DATA

VOLTAGE	HZ	WATTS	RUNNING AMPS	START-UP AMPS
115	60	185	1.6	4.1
208 -230	50/60	165	0.8 - 0.7*	1.5**
277	60	165	.6	1.5

\* Running amps will be less than 50Hz –

\*\* Line voltage can affect actual start-up amperage.

## SENTINEL FAN CURVE



## ENGINEERING SPECIFICATIONS

The Sentinel Fan units are fabricated from steel with a white powder coat finish and include seismic clip suspension points. Standard units are designed for 1-1/2" Lay In T Bar Ceilings. Optional roomside replaceable filters with gel seal are available for easy filter change out from within the clean space.

The energy efficient motor blower is a low watt backward curved impeller, single phase, permanent split capacitor type motor blower assembly with thermal overload protection. Units are available in 115V (60 Hz), 208-230V (50/60 Hz) and 277V (60 Hz).

Sentinel Fan units include a 99.99% efficient HEPA filter, MERV 8 pre-filter, seismic clip suspension points, on/off switch which disables the unit while servicing, and solid state variable speed control with RFI suppression, allowing the airflow to be fine tuned.

Final filters are protected with a white epoxy diamond pattern grille and are tested according to accepted procedures as described by the Institute of Environmental Sciences (IEST) and/or ISO standards. The standard HEPA filter is 99.99% eff. at 0.3 micron and an ULPA grade 99.9995% eff. at 0.12 micron filter is available as an option.

Roomsideserviceable units include a white polystyrene egg-crate grille in an anodized aluminum frame that is hinged to open, permitting removal of the filter without removing the unit from the ceiling. Optional perforated stainless steel or aluminum grilles are available.

**Access Port:** This port is located in the center of the filter element face and is used for measuring an upstream challenge or measuring static pressure.

**Air Flow:** Airflow ranges from 480 to 685 CFM for a 2 x 4 unit and 225 to 325 CFM for a 2 x 2 unit at 70 to 100 fpm. Airflow for units running at 50 Hz will be about 20% less.

**Sound Level:** At average face velocity of 90 FPM measured 30" from face of filter, sound level is approximately 54 dba with less than 45 dba ambient sound level. Field conditions, voltage and method of testing could produce different results.