

## Automatically Adjusts To Maintain a Constant Airflow

SAM MicroSound ECM fan filter units key features include...

- A local potentiometer to set desired airflow.
- Digital speed display.
- An electronically commutated motor that is programmed to increase the speed as the load increases to maintain a constant airflow.
- Low power consumption.

SAM MicroSound ECM GS units feature a gel channel on the upstream side of the final filter which provides a leak-free seal between the filter and the housing.

Housings are fabricated from steel with a white powdercoat finish.

The ECM motor blower is a 1/3 HP, motor with a forward curved blower. Units are available in 115V (60 Hz), and 277V (60 Hz).

SAM MicroSound Fan Filter Units include a 99.99% efficient HEPA filter, 30% ASHRAE pleated type prefilter, seismic clip suspension points.

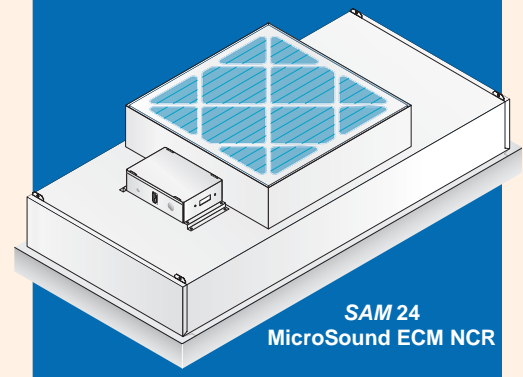
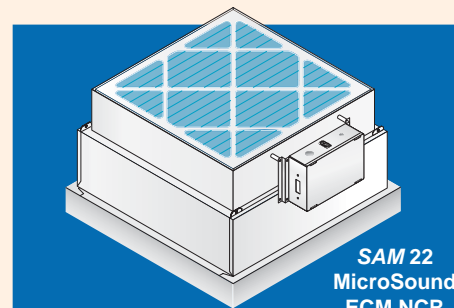
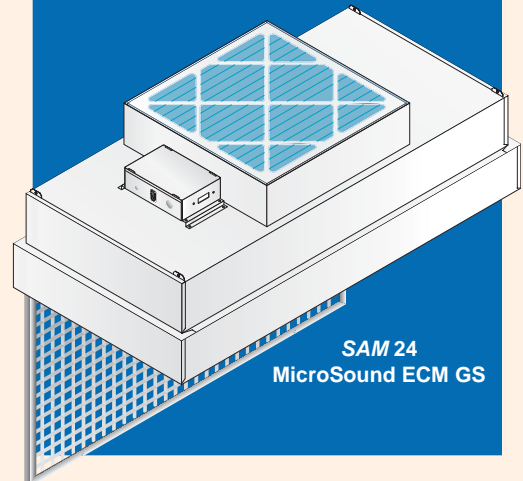
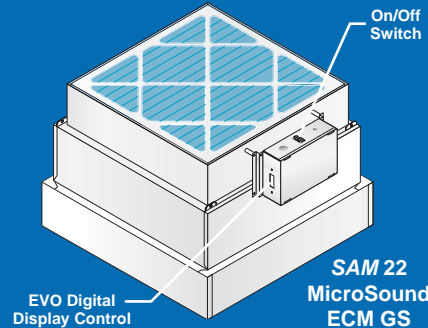
Final filters are protected with a white epoxy diamond pattern grille and are tested according to accepted procedures as described by the Institute of Environmental Sciences (IEST) and/or ISO standards. The standard HEPA filter is 99.99% eff. and an ULPA grade 99.9995% eff. filter is available as an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

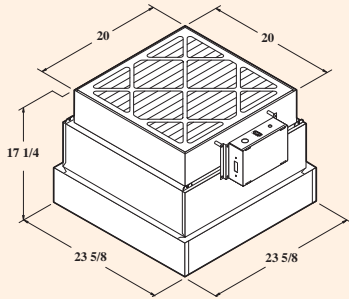
A polystyrene eggcrate grille in an anodized aluminum frame is hinged to open, permitting removal of the filter without removing the unit from the ceiling (GS models only). Optional perforated stainless steel or aluminum grilles are available.

Some of the many available options include: 2" thick prefilter, duct collars, power cord, ULPA filtration, stainless construction, SAMlink control system. Consult with your Clean Rooms International representative or contact the factory for further information.

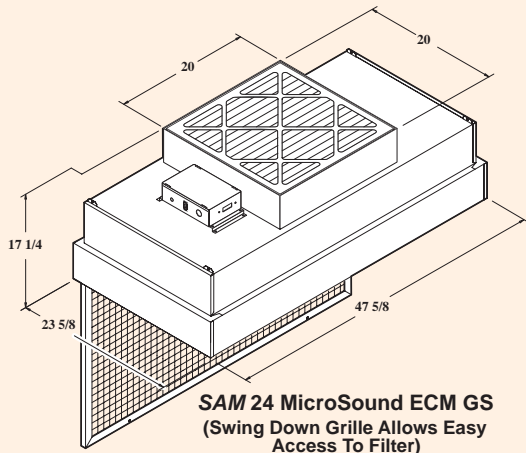
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### Standard MicroSound ECM Models

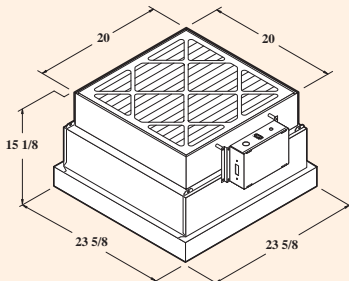




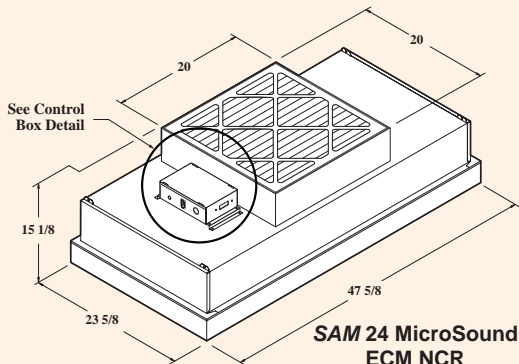
**SAM 22  
MicroSound ECM GS**



**SAM 24 MicroSound ECM GS  
(Swing Down Grille Allows Easy Access To Filter)**



**SAM 22  
MicroSound ECM NCR**



**SAM 24 MicroSound ECM NCR**

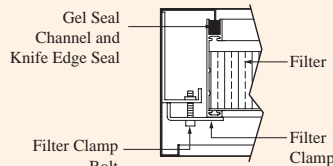
**GS Style Filter Data:** The HEPA Filter is designed for 90 FPM average face velocity @ initial 0.47 w.g. and has a rated efficiency of 99.99% @ 0.3 micron or larger. An anodized aluminum frame holds the 53mm media which is protected by a diamond pattern white epoxy coated steel grille. Final filters are replaceable from roomside.

**NCR Style Filter Data:** The HEPA Filters are designed for 90 FPM average face velocity @ initial 0.47 w.g. and have a rated efficiency of 99.99% @ 0.3 micron or larger. An anodized aluminum frame holds the 53mm media which is protected by a diamond pattern white epoxy coated steel grille. Final filters can be replaced by removing unit from ceiling, placing on a bench, removing and replacing the filter and re-installing unit in ceiling.

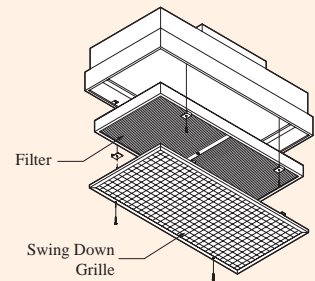
**Access Port (GS Style Only):** This port is located in the center of the filter element face and is used for introducing an upstream challenge or measuring static pressure.

**Air Flow:** Designed for 90 FPM +/- 20%. At 90 FPM the CFM is 630 for the NCR style and 520 for the GS style.

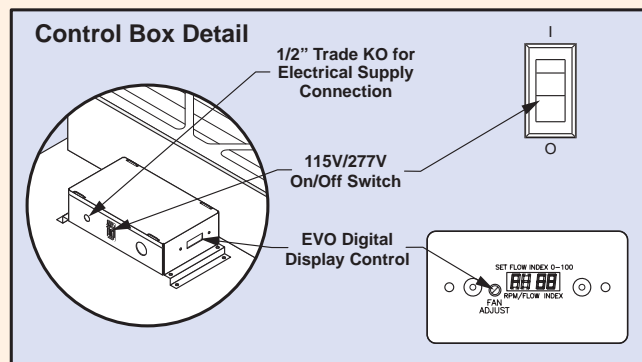
**Sound Level:** At 90 FPM with a clean unloaded HEPA filter and zero e.s.p. the sound level is 50-53 dBA. See Performance Graph on following page.

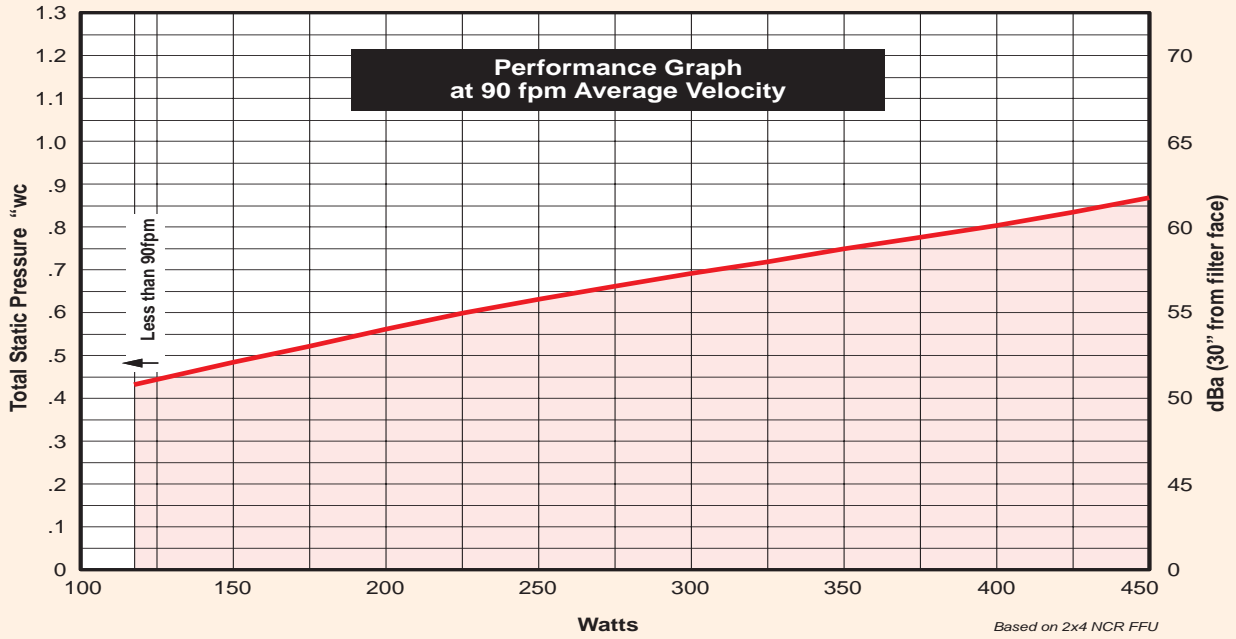


**Filter Clamp Detail**



**Exploded View**





Base Model (Ordering Information)						
Mfg. Code	Model or Description	Style	Size	Voltage	Motor	HEPA Filter
12327	SAM 22 MS ECM NCR	NCR	2 x 2	115	ECM	302070
12329	SAM 22 MS ECM NCR	NCR	2 x 2	277	ECM	302070
12330	SAM 22 MS ECM GS	GS	2 x 2	115	ECM	302201
12332	SAM 22 MS ECM GS	GS	2 x 2	277	ECM	302201
12333	SAM 24 MS ECM NCR	NCR	2 x 4	115	ECM	302090
12335	SAM 24 MS ECM NCR	NCR	2 x 4	277	ECM	302090
12336	SAM 24 MS ECM GS	GS	2 x 4	115	ECM	302200
12338	SAM 24 MS ECM GS	GS	2 x 4	277	ECM	302200

Comments:

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*For more information and illustrations please refer to the back of this section*