reduction **noise**

Silentium ActiveSilencer™ Enclosure for Intel® Modular Server

Built on Silentium proprietary Active Noise Control technology

A fully populated & powerful Business-in-a-Box server or HPC Personal Cluster with up to 6 server compute modules and 14, 2.5" hard drives generating the same noise as 1 standard pedestal server.

Brings Intel® Modular Server to the office.

The ActiveSilencer™ Enclosure (ASE™) is custom built for the Intel® Modular Server System MFSYS25 for enabling deployment in a business office as a Business-in-a-Box Server or High-Performance Computing (HPC) Personal Cluster.

Silentium has worked with Intel® to design the enclosure to reduce server noise by up to 10dB(A) without causing any thermal degradation. Utilizing Silentium's Active Noise Control (ANC) technology, the ActiveSilencer™ Enclosure (ASE™) can achieve unprecedented spatial noise reduction over the entire frequency bandwidth of the audible spectrum, while maintaining constant airflow to the unit to keep it cool.
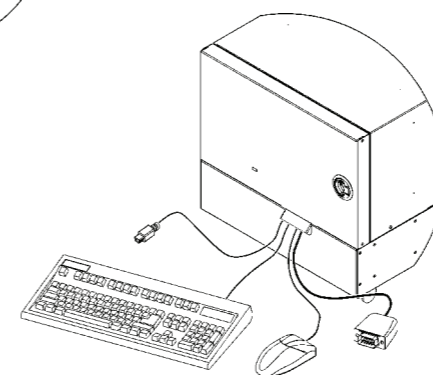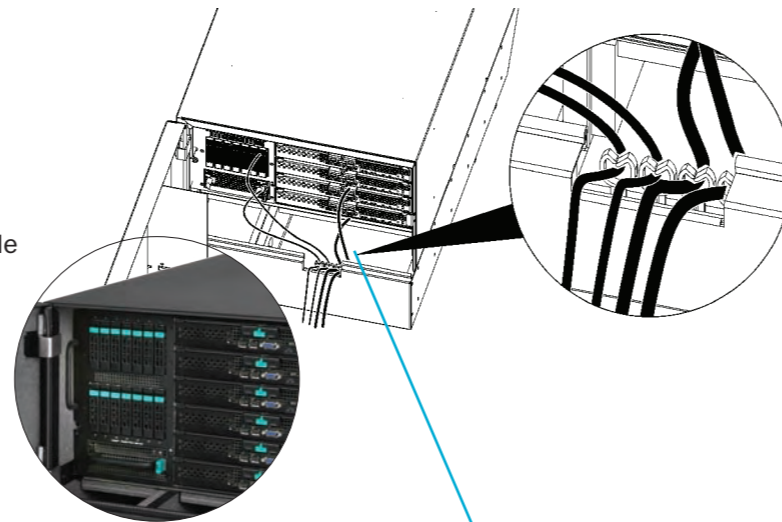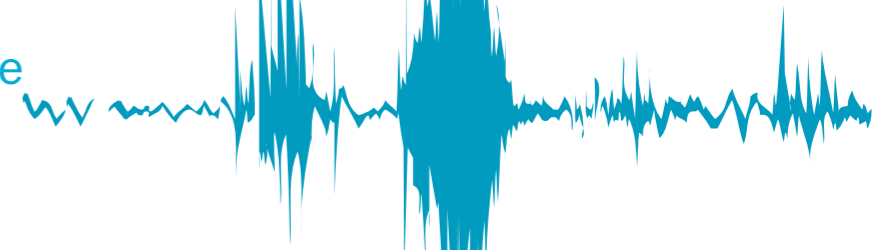
Active noise Control Technology

Silentium's unique solution for dramatically reducing noise generated by fans while allowing undisturbed air flow.

Up to 10dB(A) noise reduction is achieved through canceling the original noise with an anti noise signal, occurring at the rear duct. By using a microphone to capture the original noise, an Active Noise Reduction controller is equipped with Silentium's proprietary algorithms for generating an anti noise signal and a speaker to transmit it.
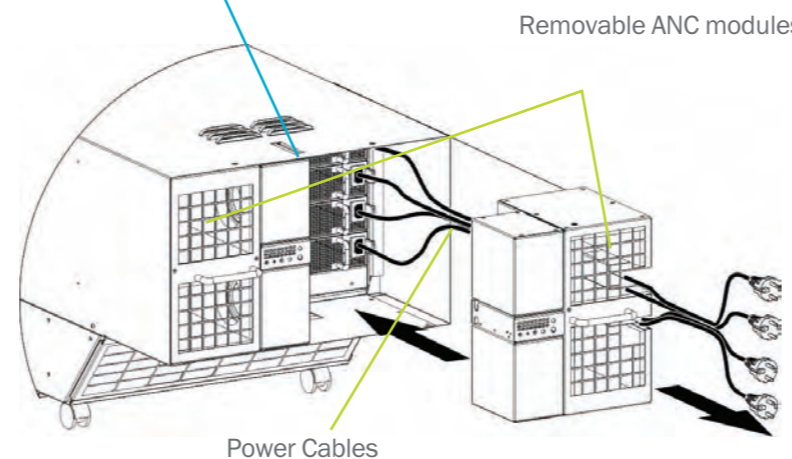
Thermal Dissipation

The ActiveSilencer™ Enclosure design allows fresh cool air to come in through the bottom rear of the inlet duct. The cool air moves along the duct to the Front Door. The air then flows through the server and is expelled out through vents in the top of the ActiveSilencer™ Duct unit, keeping the server cool.

ASE™ front chassis cable accessibility:

ASE™ rear chassis cable accessibility:

Removable ANC modules

Power Cables

I/O Communication Cables

Benefits of ActiveSilencer™ Enclosure for Intel® Modular Server:

- Brings Intel® Modular Server to the front office

- Simple non-rack installation

- Wheels allow inner office mobility

- Lockable front door provides security by preventing unauthorized access

- Air filters at the rear and bottom sides keep the Modular Server dust free

- Easy assembly: The ASE is built of 3 main parts, making it easy to install

- Accessibility: Easy access for cabling through rotating front door and removable silencer at the back.

Technical Specifications

Configuration
- Raised floor with castor wheels (locks on front 2 wheels)

Front
- Front door for easy access to server modules, storage bay & I/O fan module

Rear
- Two Active Noise Control Units
- Optional air filter
- Cable routing through the enclosure

Enclosure Size
- Height: 489mm, 19.25"
- Width: 493mm, 19.41"
- Depth: 1051mm, 41.38". Allow 15mm, 0,59" for cabling
- Weight: 43 Kg, 95 Pounds.

Power Requirement
- Two 30-watt DC output power supplies

Power Consumption
- Max: 14W

Noise Rating
- Reduction of noise up to 10dB (Intel Modular Server rated at 70dB maximum)

Chassis Environment
- Operating Temperature: 10°C to 35°C, 50°F to 95°F
- Storage Temperature: -40°C to 70°C, -40°F to 158°F
- Altitude: -30 to 1,500 m, 100 to 5,000 ft

Non flammability
- All acoustic materials are UL-94, HF1 certified

THE SILENTIUM ADVANTAGE

Silentium specializes in developing innovative noise reduction products and solutions, combining proprietary ANC algorithms with acoustic insulation.

Silentium's unique ANC technology is capable of covering a wide audible spectrum, up to 1800 Hz.

Silentium has also collaborated with General Motors, Delphi, BEHR and Venmar to find quiet solutions to fan generated noise.

For more information on Silentium ActiveSilencer™ Enclosure, visit: **www.silentium.com**

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Silence in a Chip