



How does a soundproof server cabinet reduce environmental noise

Although the digital world we live in today is enhanced in innovation and progress, there are certain annoying aspects we cannot avoid—for example, the constant buzzing noise from the equipment in a server room. Prolonged exposure to such noise in a high-technology workspace can lead to a loss of productivity. It can also lead to depression and hearing impairment.

A solution to reduce noise

The [soundproof rack](#) is an ideal option to minimize this sound since they are equipped with active noise-cancellation technology, which is highly effective in reducing low-frequency noise. In addition, a soundproof server cabinet is designed to reduce noise created by high frequency waves by blocking or absorbing these sound waves. This is achieved through several different mechanisms:

Sound-absorbing materials: The cabinet is lined with materials that absorb sound waves, such as acoustic foam or fiberglass insulation. These materials are designed to trap sound waves and prevent them from bouncing inside the cabinet, reducing the amount of noise that escapes.

Sealing: The cabinet is designed as per IP50 rating, with sealed edges and doors that prevent sound from escaping. This helps to create a barrier between the noise inside the cabinet and the surrounding environment.

Netrack's Acoustic racks

Here it must be mentioned that the advantage of an acoustic rack lies in the reduction of the noise drastically to a level of 30 dBA, which is below the audibility level in an office space that varies between 48 dBA to 78 dBA. It is explicitly designed to eliminate the equipment noise through multilayer acoustic material within the inner surfaces to achieve a superior level of noise reduction from high-frequency noise. The ASFT (Active Silence Fan tray) in acoustic racks reduces the noise produced by auxiliary fans and installed equipment noise to the surrounding noise level. It is considered the best soundproof rack empowered with a fire retardant. Hence, it can be mentioned that the Acoustic Racks manufactured by Netrack are a desirable solution for such noise issues.

These acoustic racks are designed with efficient thermal and airflow management to prevent the equipment from overheating or any fire outbreak. These racks are very popular among hospitals, airports, hotels, educational institutions, banks, and R&D labs. The acoustic rack enclosures offered by Netrack use passive foam to draw hot air from the dust filters. This

ensures that the airflow remains undisturbed as it enters from the front and is expelled at the rear. Such airflow management through passive cooling can handle up to 7kW of IT load. The best part about these acoustic cabinet enclosures is that they are easy to set up and can be customized to suit the aesthetics of a workspace.

Final word

Overall, a soundproof rack is designed to create a controlled environment for the servers while minimizing the impact on the surrounding environment. Reducing environmental noise can create a more comfortable and productive work environment while also improving the overall efficiency and performance of the servers themselves.

Netrack offers a soundproof rack that reduces environmental noise by using materials that absorb and block sound waves, creating a barrier between the noise source and the surrounding environment.



NETRACK
ENCLOSURES
STORE | SECURE | STREAMLINE | SYSTEMISE

**How does a
soundproof server
cabinet reduce
environmental noise?**

www.netrackindia.com