

CLEAN THE AIR TO PROTECT YOUR INVESTMENT

Today's business runs on information technology—and that information technology depends on servers. However, many server rooms fall prey to a tiny hacker bent on disrupting service and shutting down computers: airborne dust.



If dust isn't removed, it can increase equipment temperatures up to **30 degrees**



80% of dust in a server room is tracked in on the soles of shoes



Downed servers cost businesses up to \$5,600 a minute



A single downtime event can cost a company up to \$500,000





The dangers of dust

Oftentimes, IT professionals protect their server room investment with elaborate cooling systems. However, those systems can contribute to dust problems, because the pulleys and belts in the internal workings fray, creating more dust. Then, cooling systems just recirculate dust in the air, letting it get sucked into server fans, where it settles on circuitry.

What's more, dust acts as an insulator, covering circuit boards and not allowing heat to dissipate. And, dust can also carry conductive materials in it that can cause shorts in electrical contacts. So, the dust in a server room can effectively shut down operations.

While the average cost of repair is \$10,000, there's more loss to consider. productivity hits a standstill, with business users unable to work because of computer downtime. That's why a single downtime event can cost a business up to \$500,000.

Cleaning the air for success

While facility managers can try to fight the battle—using microfiber cloths and vacuums with HEPA filters—surface cleaning just is not enough. In fact, you can clean aggressively under raised floor cabling, but that just kicks up dust into the server room's air, to be blown about by the cooling system.

To truly solve the problem, cleaning the air must be included. One great way to do that involves installing Aeramax Professional air purifiers in server rooms. These commercialgrade units use a unique four-stage filtration system to remove up to 99.97 percent of contaminants like dust—along with bacteria, allergens, harmful volatile organic compounds and germs—from enclosed spaces. By tackling the dust in the air, facility managers can ensure servers and delicate computer equipment are maintained in optimal conditions—and ensure no loss in productivity.

The Aeramax Professional air purifiers also feature optional PureView[™] technology, which features a visual display of the PM2.5 particle counts entering the units and the clean air coming out. The units also employ patented EnviroSmart[™] Technology that senses sound, motion and odors in a room, automatically adjusting to optimize performance.

Infographics source: Effects of Dust on Computer Electronics and Mitigating Approaches, 2009.

