

Data Center Cleaning with Handheld Particle Counter



KANOMAX
The Ultimate Measurements

Application Note

Using a Handheld Particle Counter to Add Value to Data Center Cleaning Services

When we talk about particle counters most of the time we focus on cleanrooms and other controlled environments, but there are many other applications where counting particulates is desirable. These include IAQ investigation, filter testing and other applications like this month featured story: Data Center Cleaning.



*Model 3887
Handheld Particle Counter*

A data center may hold telecommunications, IT or other sensitive electronics (typically large servers). Because of the cost of the equipment and the volume of it that can be contained in a data center special care must be given to the environment. Ventilation, temperature and humidity must be carefully controlled to ensure the components stay within the manufacturer's specification otherwise the life of the equipment is shortened and malfunctions can occur. This can be a very costly problem since equipment failure often means a loss of service for those depending on the data housed in the data center, which in turn results in emergency repairs and potential technician overtime.



Data Centers often house many racks of expensive servers and other equipment; maintaining a controlled environment and regular cleaning are vital to avoiding costly malfunctions and service calls.

In addition to temperature and humidity, particulates can also cause damage to sensitive equipment. As dust accumulates on circuit boards it reduces the cooling efficiency of the components and may cause overheating issues. A good ventilation system that creates positive pressure inside a data center can help control the amount of particulates that the equipment is exposed to, and periodic cleaning by a professional can also help control particulate levels and prevent problems from developing.

The 3887 handheld particle counter can be an invaluable tool for Data Center Cleaning companies trying to sell or show the value of their services. To attract new customers the 3887 can be used as an evaluation tool. An easy way to do this is with the CALC (calculation) mode. This will allow you to show your customer the average amount of particles measured over a period of time as well as the minimum and maximum amounts detected and the standard deviation. By stressing the damage that large concentrations of particulates can do to equipment over time and then providing a baseline reading of existing particulates for a potential client you can show the value of your cleaning service. For existing or first-time clients you can use the 3887

in CALC mode to show the particulate count before the cleaning and then again after the cleaning to show how periodic cleaning reduces the overall particulate level in the data center and helps ensure equipment longevity. By putting a quantifiable number in front of your customer you can show the effectiveness and value of the service you're providing. It also serves as a way to differentiate yourself from the competition which is always a good thing when trying to increase brand awareness and grow your business.



The 3887 is light-weight and easy to use

So why use the 3887 over other particle counters? The primary reason is the economical price. A data center is not a cleanroom. While you want to show the value of your services to the client you don't want to spend a fortune on a high-end, high-volume particle counter to do it. A handheld unit that just does basic particle counts is sufficient. Another reason is the pre-programmed ISO mode in the Kanomax 3887 gives you an easy baseline to use for evaluations. And finally, you can use Kanomax's 60-year reputation in the marketplace and the fact that the 3887 is NIST traceable to add to the credibility of your reports.

Another reason to use the Kanomax 3887 is we have complimentary product lines that are valuable to data centers. The TABmaster capture hood is an excellent way to check ventilation rates at supply and return ducts. Our handheld anemometers (available with pressure options) can be used to

verify air flow at key points in server racks and check the pressure of the server room. We also offer a 24/7 temperature and humidity sensor complete with cloud data storage that allows the user to monitor the condition of multiple locations from a single convenient location or remotely from anywhere there is internet access.

Being able to recommend a complimentary line of product solutions can make you seem like a data center guru to your customers and keep your business fresh in their mind. Whether you're a data center cleaning company or a testing and balancing contractor Kanomax can help you expand and grow your business. Our engineers and sales team are always looking for innovative ways we can help you solve problems for your business and customers.

About Kanomax USA, Inc.

Kanomax has delivered the best measurement solutions in its products and services that adapt precision measurement technology for fluids and particles. Kanomax product lines include anemometers, particle counters, dust monitors, and IAQ monitors. Kanomax is contributing to technological innovation and quality improvement for the processes of quality management, environment management, and technology development in the areas of environment, health, and energy, which are essential to sustain human well-being, as well as in other industrial areas including automobile, aerospace, semiconductor, electronics manufacture, heavy industry, steel, shipbuilding, pharmaceutical, biotechnology, food-processing, medical, construction, and civil engineering.



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