Intelligent Airflow Control
Targeted Data Center Cooling

HotSpotr™

Maintain Safe Rack Temperatures

Manage Contained Aisle Pressure

Increase Data Center IT Capacity

Compensate for Localized Low Pressure

Zero Server Downtime for Installation

Patented Networking for a Complete Solution

AdaptivCOOL®

A Product of Degree Controls Airflow & Thermal Technology

HotSpotr™

uptime
thermal safety
for your
data center

Immediately Eliminate Hot Spots

Successful data center cooling is dependent on how effective airflow is distributed and supplied. HotSpotr™ is a line of intelligent air movers that allow you to deliver cooling to server racks and remove heated exhaust air from the data center room. Our system eliminates hot spots by providing the appropriate cool air resources needed for mission critical servers, without depleting airflow required by other servers and rows within the room. Using intelligent measuring and monitoring of the Data Center space, the HotSpotr Floor Tile (HT-510) and Overhead Air Mover (HT-710) perform auto-balancing of your valuable cooling supply, enhancing the effectiveness of your Computer Room Air Conditioners (CRAC).

A single HotSpotr floor tile can monitor and service multiple racks. Each HotSpotr comes with 2-4 remote sensors, which you place as needed, for localized control – or you can network multiple HotSpotr units together. This intelligent technology (U.S. Patent 6,881,148 B1) can be networked to your Building Management System to provide visibility and integrated control in your Data Center.

Increase Cooling Effectiveness

Due to the complexities of data centers, there is never perfect cooling distribution or consistent power load across the room. If your data center is like many that has more than enough cooling tonnage, but is running out of localized cooling supply, installing an additional CRAC is not the solution. Adding HotSpotrs will pull air to where you need it to overcome underfloor congestion and room/CRAC layout; recouping your cooling resources and allow for additional server load.

Installing HotSpotrs are not only the smart way to solve airflow problems, but also the most cost effective. Twelve HT-510's will supply the airflow equivalent of one 30-Ton CRAC with less than 1/3 the cost to implement and only a third of the cost to operate per year.

Non-Disruptive Installation

When installed, HotSpotr fit seamlessly and are practically invisible. There is no server downtime required for installation. The self-contained grate and air moving unit becomes part of the floor and overhead units are hidden above. Installation is quick and easy and requires no movement of existing racks. In fact, HotSpotr in-floor units require no special tools. Simply plug in and power on. In-floor units are designed to replace a standard size floor tile using less than 127 mm (5") of underfloor depth, eliminating the clutter of portable fans and spot coolers. Overhead units fit into the space above the ceiling, effectively disappearing with only the intake and exhaust visible. The overhead return drives hot server air back to the computer room air conditioners, removing heat and improving CRAC performance.

HotSpotr® Uninterrupted Cooling

What happens when you lose power? The CRACs stop working and backup generators go into action to restore the power supply to CRACs – left unchecked, this can cause a thermal runaway condition and IT failure in a short 'lifetime' of minutes.

When the CRACs stop, the underfloor plenum has a cool reservoir, but without any pressure or airflow. HotSpotrs running on a UPS backup continue to deliver and circulate cooled air from within this chilled plenum. Tests prove that the supply air temperature of the HotSpotrs remained steady for more than 10 minutes, even with all CRACs off. Showing once again that the Intelligent Cooling System provides *Uptime Assurance*!

Improve Containment Efficiency

Containment is an excellent approach to eliminate mixing and improving cooling efficiency. However, it requires higher plenum pressure to ensure supply air is entering the contained area. By using intelligent HotSpotr technology Aisle Pressure Management (APM) ensures proper cooling of raised floor cold aisle contained areas, regardless of which CRACs are running. Ask us about using HotSpotr air movers to manage your contained area, using our Aisle Pressure Management solution. Increase cooling resource visibility, redundancy and CRAC failure management with APM.
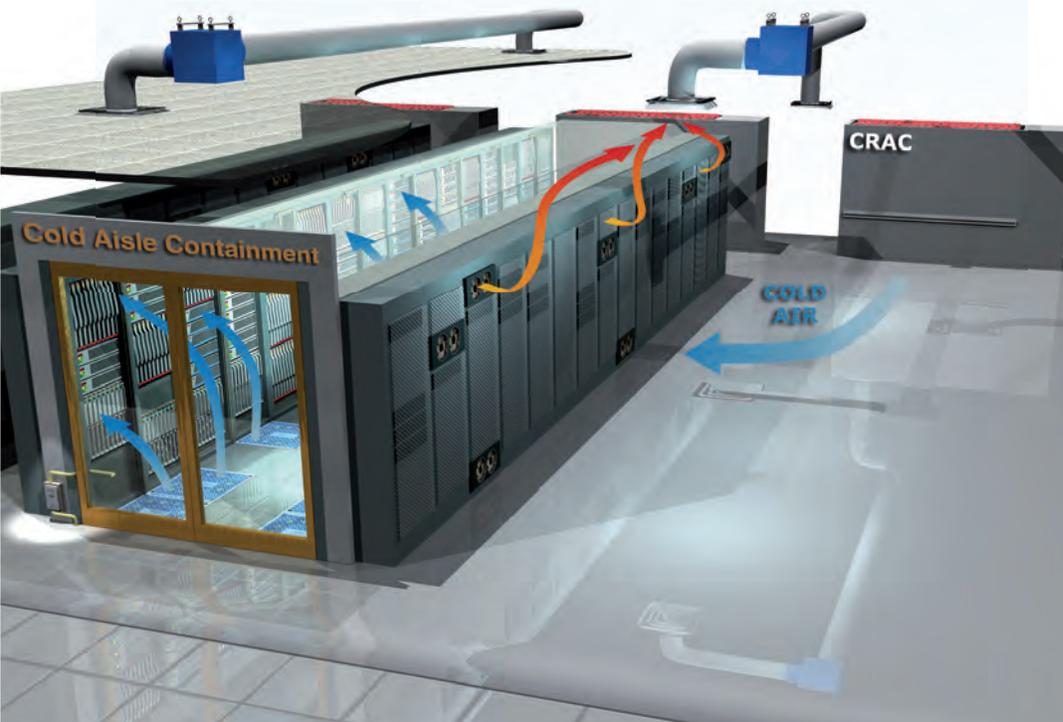
HT-110T
Always on Underfloor Air Mover

No Temperature Sensors

HT-510T
Thermostatically Controlled Underfloor Air Mover

Rack Mounted Temperature Sensors (Networkable)

HT-710
Thermostatically Controlled Overhead Air Mover

Internal Temperature Sensors

HotSpotr® uninterrupted cooling

	HT-510	Competition
Patented Ability to Network Together (U.S. Patent 6,881,14 B1)	✓	None
Seamless Integration with Larger Solutions	✓	Patent Limited
Eight High Performance DC Fans	✓	1-4
Up to 4 Temperature Sensors Per Unit	✓	0-3
100 - 240VAC Autoranging	✓	Single Voltage
Under 127 mm (5") Mounted Depth	✓	>190 mm (7.5")
Drop In Installation	✓	Assembled Under Floor
Works with All Flooring Systems	✓	No
Made in the USA	✓	Not Typically
Emergency Power Off (EPO)	✓	None
Integration with DCIM, BMS	✓	None

physical specifications (without grate)

Dimensions	558 mm x 558 mm x 66 mm (22" x 22" x 2.6")
Weight	7.2 kg (16 lbs)
Mounting Options	A: Direct Attachment to Cast Aluminum Grate
	B: Bracket to Raised Floor Stanchions
Airflow	1200 CFM at 0 Static Pressure

electrical specifications

Operating Voltage	110-240 VAC 50-60 Hz
Operating Current	2.0 AMP Max @ 120V
Power Input Connector	IEC C14 Socket Accepts IEC C13 Cordset
Temperature Settings	Two Thermistors with Connections for Two Additional Thermistors

AdaptivCOOL®

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