

Within the data center environment, managing the balance between providing sufficient airflow to cool high density server racks, whilst not wasting energy through over cooling is a constant battle. Managing the airflow into the data center is key to achieving reliability and energy efficiency.

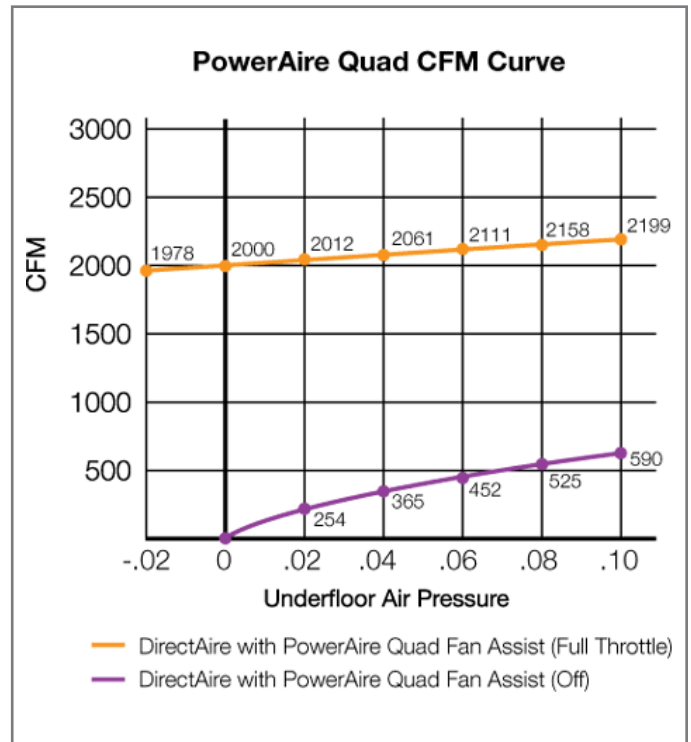
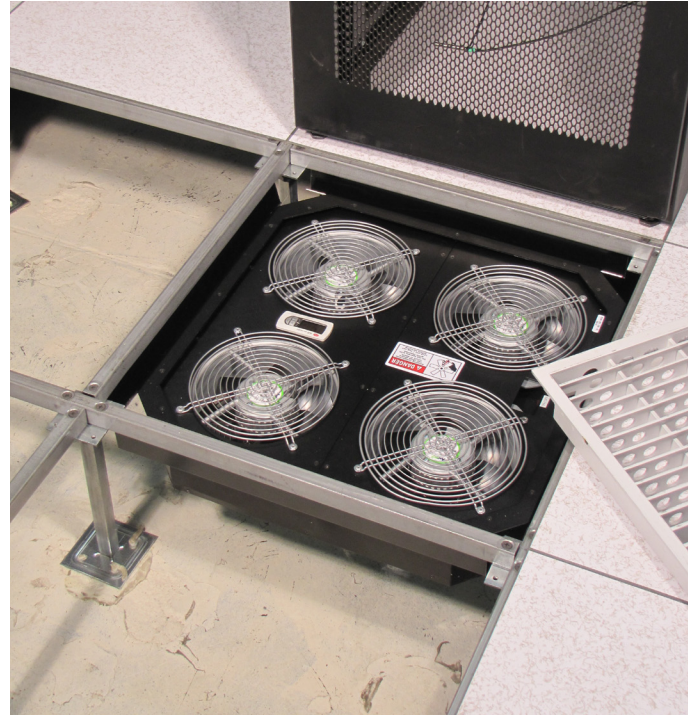
Tate's PowerAire Quad fan assist is designed to provide a blast of cooling through an individual airflow panel, ideal for cooling the toughest hot spots in a data center. It is equipped with four fans connected in parallel to provide built in redundancy.

Equipped with variable speed fan drives all four fans can be throttled up or down based on the heat load requirements. Easy to install and only 4" deep, PowerAire Quad is ideal for retrofit situations with finished floor heights as low as 7.5"

For more information on Tate's PowerAire Quad fan assist, please contact Tate's Technical Hotline at **800-231-7788** or visit www.tateinc.com/products/poweraire_quad.aspx

Features & Benefits

- Zero maintenance
- Multiple control options
- High Precision, Quick Response Temperature Measurement
- User programmable set point
- Viewable Peak Temp for walkthrough check of each rack
- Infinitely variable fan speed from 0-100% for precise airflow control
- 0-16kW supported IT load per PowerAire/DirectAire combo @ 0.1" H2O



The graph above shows the CFM delivered through a DirectAire panel equipped with PowerAire Quad fan assist compared to a DirectAire panel with no fan assist.

PowerAire [®] Quad w/ DirectAire [®]		
Static Pressure (in. wc)	CFM @ 100% Power	CFM @ 0% Power
-0.08	1695	
-0.06	1806	
-0.05	1856	
-0.04	1902	
-0.02	1978	
0	2000	
0.02	2012	
0.04	2061	365
0.05	2086	411
0.06	2111	452
0.08	2158	525
0.1	2199	590
0.12	2235	648
0.14	2263	702
0.16	2284	752
0.18	2297	799
0.2	2303	844

The table above shows the amount of CFM and corresponding kW/rack @ 0.1" H2O static pressure that has been mathematically calculated through Tate's DirectAire panel with PowerAire Quad.

PowerAire Specifications

- 4 x EC Fans for 100% variable airflow supply and redundancy
- Three probes for accurate temperature control
- Visual user interface for set point control
- Fan speeds infinitely variable 0 - 100%
- Supports 0 - 16kW IT Load at 0 Pa
- Consumes < 255W at 100% fan speed
- 23.1" x 26.7" x 4" for use in 7.5" FFH or greater
- Unit shall draw less than 252 W during peak operation