

# EC FAN UPGRADES

Performance Services



## Enhanced Efficiency

Energy efficiency optimization can be achieved not only in overall data center infrastructure, but also by simply upgrading specific components.

In thermal management units, upgrading AC Fans to EC Fans is a winning strategy in terms of energy saving. EC Fan upgrades allow data centers of all sizes to automatically adjust cooling unit capacities to match the IT server demands and improve energy efficiency, as well as Power Usage Effectiveness (PUE).

Significant savings can be achieved by reducing power consumption and energy costs, while maintaining the optimum performance of cooling units.

EC Fans offer a simple means of introducing energy efficient technology by regulating airflow and reducing fan input power. This significantly minimizes energy consumption and extends component life.



### Maximize Availability, Reliability and Efficiency of your Critical System

Vertiv's comprehensive Service portfolio is designed to increase equipment and application uptime, as well as extend unit life - in turn maximizing availability, reliability and efficiency.

Vertiv's preventive maintenance and technology upgrade programs have been developed to implement energy saving solutions for already installed equipment.

Part of the upgrade program portfolio is dedicated to EC Fan upgrades. These are designed to optimize the performance of installed cooling units, delivering great energy efficiency advantages for data center installations.

EC Fan upgrades thus represent a key energy saving opportunity for thermal management equipment, drastically reducing energy consumption.

## BENEFITS

- Energy savings increased by 50%
- Guaranteed 100% continuity and reliability
- Optimization of site management
- Rapid payback investment
- Increased availability.

## Boosting Energy Savings

EC Fans deliver a number of benefits, the most attractive being that it can deliver up to a **50% increase in energy savings** compared to AC Fans. Further savings can also be achieved by simply reducing the fan speed, thus leading to optimized energy conservation airflow distribution and reductions in noise levels.

In addition, EC Fans are built with integrated protection, guaranteeing **100% continuity and reliability** without the need for additional motor protection.

The innovative and energy efficient EC Fans reduce power consumption by regulating airflow and reducing fan input power. Adjusting airflow patterns, by controlling the speed of the EC plug fans, allows cooling unit capacities to adapt quickly to changing room conditions.

## Intelligent Control & Site Management

The intelligent control logic of EC Fans, furthermore ensures optimization of site management and efficiency through its dynamic ability to adapt to varying airflows. When operating within cold aisle containment installations such as Vertiv™ SmartAisle™, this dynamic operation leads to unparalleled efficiency and flexibility.

EC Fan upgrades deliver: conditions.

- Significant increase in energy efficiency, also in compliance with ErP 2015 European Directive
- Rapid payback investment (average 2 years)
- Increased availability of your critical infrastructure.

## Unit Upgrades

All thermal management units can benefit from EC Fan upgrades. The advantages for chilled water-based units are particularly effective in delivering significant savings and providing an optimized return on investment time.

Operation is further optimized by networking the cooling units through intelligent controls such as Vertiv ICOM™.

This ensures the units work together as a system to optimize performance and efficiency.

## Comprehensive Upgrade Services

Vertiv's certified Customer Engineers perform EC Fan upgrades on-site.

The upgrades include:

- Fan replacement and installation together with all accessory parts
- Cabling check
- Electric board modification
- Final system testing post-installation.



EC Fan components