



HP: Continued Leadership in Power and Cooling

- HP has the largest server installed base in the industry based upon being first to market with dozens of technological innovations surrounding uptime, management and reliability
- Since 1992, energy efficiency has been a key part of HP's global citizenship program
- HP co-led the efforts for both the Uptime and American Society for Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) power trend projections and has been driving industry standards with the Green Grid alliance and the U.S. Environmental Protection Agency
- HP is a current contributor to the EPA server efficiency standard and has drafted a proposal for a data center measurement protocol, currently in review
- In 2002, HP was the first to introduce high-level, scalable data center metrics
- To date, HP as a whole has more than 1,000 cooling patents
- HP Services has a variety of data center assessment offerings designed to increase the efficiency of existing IT deployments and optimize new data center designs
- HP was the first company to offer a full family of systems using AMD Opteron™ and Intel® Xeon™ and Itanium® technology
- HP was the first company to refresh its server and blade lines with small form factor SAS hard drives, resulting in storage subsystems that consume less power and give off less heat
- Recent news
 - In November 2006, HP and World Wildlife Fund-US announced a joint initiative to reduce greenhouse gas emissions from HP's operating facilities worldwide, educate and inspire others to adopt best practices, and use HP technology in conservation efforts around the world
 - In November 2006, HP announced a new energy management system and key initiatives to bridge the gap between facilities and IT and help customers dramatically reduce data center operating costs.
 - In early November 2006, HP pledged to reduce carbon dioxide emissions by 15 percent from all HP-owned and leased facilities by 2010 (from current levels)

- In June 2006, HP introduced BladeSystem c-Class portfolio with Thermal Logic and Active Cool fans, resulting in a significant boost in cooling, while requiring considerably less power to operate
- In February 2006, HP introduced Modular Cooling System to support the highest levels of power density in the industry

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