

Building Solutions

Use the power of GE's intelligent technologies to improve a building's productivity, efficiency and profitability.



Electrical efficiency

Reduce your building's operational costs with GE's electrical control systems.



Optimizing motor controls with AF-6 Series Drives, a product of ecomaginationSM



- ✓ Improved power, HVAC control

Flow and energy meters



- ✓ Accurately monitor energy consumption

Reduce operational cost
Up to 78%

Reduce energy use
25-40%

Monitoring systems

GE's meters, software, and hardware can reduce wasted energy, carbon emissions and water consumption contributing to LEED compliance.



Flow and energy meters



- ✓ Accurately measure energy consumption and CO₂ levels

GE's Proficy Process Solutions



- ✓ Increase safety, reduce maintenance, and reduce fuel cost

Reduce power consumption
10-20%

Reduce water consumption
20-40%

Power and electrical

Full range of backup power management, control, and energy efficient uninterruptible power supplies.



GE ecomagination certified 750kVA UPS system



- ✓ Zero downtime

Transient voltage surge suppressors



- ✓ Safe, reliable power

Best in class load efficiency
94.4%

Safety and security

Full range of security and life safety solutions including video, fire, access and intrusion.



Mass notification



- ✓ First to meet UL2572 standards for Mass Notification

Facility Commander



- ✓ Central management of threat detection and crisis management systems

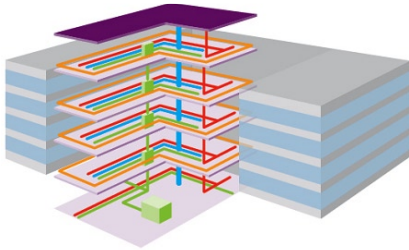


GE creates cleaner, smarter and safer facilities

GE is reducing annual energy consumption by more than 11% in our own company data center

With data centers currently using 1.5% of the total electrical output of the U.S., and forecasted to grow more, productivity and efficiency are taking a front and center roles. GE's Ohio-based data center consumes 24 million kWh of power each year.

A complete solution can consist of nearly 30 GE products, including efficient lighting, GE Sensing's Telaire sensors and Ventu-lator™ program, PPS Building Management System, 750kVA SG series UPS, TR Series transient voltage surge suppressors, Facility Commander security system and IT services equipment to help with the reduction of water and energy usage.



- **Power** – power management systems, power quality, and power supplies to make sure there is always electricity flowing to the center
- **Control** – process solution combines state-of-the-art hardware, and software was installed as the automation infrastructure for the whole system
- **Security** – system includes access control, fire and life safety systems and video surveillance

Results of Ohio data center upgrade

Benefit	Metric	Before	After	\$ Value	Context
↓ Power consumption	kWh/yr	24.0MM	22.7MM	\$84,500	11% cooling costs 5.5% overall cost
↓ Water consumption	Gallons/yr	10MM	7-9MM	\$6,000	20% water savings 50% chemical treatment reductions
Zero downtime	Unplanned Downtime (min)/yr.	2 occurrences	0 occurrences	~\$200,000 (estimate)	redundancy to avoid unplanned downtime. proactive maintenance ability

Based on a 30,000 sq. ft. data center, raised floor, 3,800 servers, 2/5MVA UPS

Remove 90 – 150 cars from U.S. roads

Using ten GE 750kVA Uninterruptible Power Supply (UPS) systems in a typical data center, at 50 percent load rather than competitors' systems, can avoid the annual emission of 460 – 780 metric tons of CO₂ on the U.S. grid, equivalent to the annual CO₂ emissions of 90 – 150 cars on U.S. roads

Plant 25 acres of forest

By applying ten AF-600 FP Fan & Pump Drives, each rated at 10 HP, to an HVAC system operating for 12 hours a day at 60% speed, instead of applying mechanical devices to a system running at 100% speed, a customer could avoid approximately 165 metric tons of CO₂ emissions per year, equivalent to the CO₂ absorbed annually by 25 acres of forest.