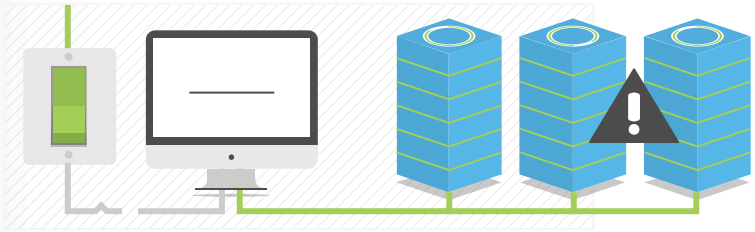
GE
Critical Power

# The energy behind your business.

# CRITICAL POWER

## WHAT IS IT

**Critical power systems** are energy management systems that detect outages, start back-up generators, and provide clean power to mission-critical equipment.



## WHY DO WE NEED IT

### DATA IS GROWING

Over the next decade, the amount of information managed by data centers will grow by a factor of **50**.

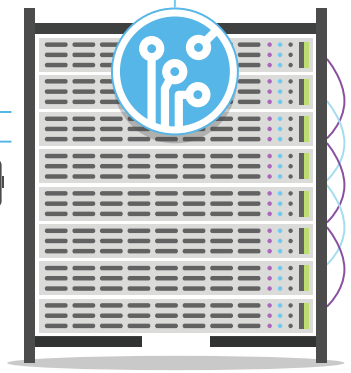
Currently, these data centers consume **247 TWh** per year of electricity.

That's equivalent to **4.1** times the amount used by New York City. By 2025, the amount will grow to the equivalent of between 9 to 14 mega cities.

### EMBEDDED POWER

**AC/DC** power supply modules for datacom or distributed power servers

**DC/DC** circuit board mounted power modules with higher densities and improved efficiencies



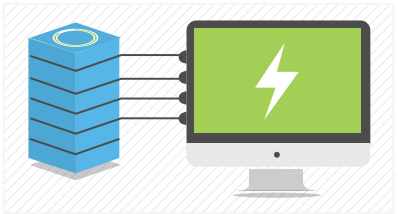
Aggregate electricity use for data centers doubled worldwide from 2000 to 2005, and continues to grow.

The EPA identified adoption of higher efficiency UPSsystems as a key factor in reducing datacenter power consumption.

### IMPORTANT TO THIS SYSTEM

is equipment that includes:

- **Uninterruptible Power Supply (UPS) System :** a battery-powered AC backup system that ensures continuous power delivery to electronic and electrical applications
- **DC Energy Systems :** a battery-powered DC backup system that ensures continuous power delivery to electronic and electrical applications
- **Automatic Transfer Switches (ATS) :** power transfer products for emergency standby and critical power applications
- **Paralleling Switchgear (PSG) :** back-up power supply for capacity/emergency applications with more than one power source
- **Surge Protective Devices (SPD) :** spike or surge protection to ensure power quality



### MISSION CRITICAL FACILITIES,

if destroyed, would disrupt business continuity, public health, safety, or national security, such as:

- COLLEGES/ UNIVERSITIES
- DATA CENTERS
- HOSPITALS
- FINANCIAL DATA PROCESSING
- COMMUNICATIONS CENTERS
- AIR TRAFFIC CONTROL CENTERS
- HAZARDOUS MATERIALS HANDLING
- TRANSPORTATION CENTERS

*Which are vulnerable to*

- Natural disasters, such as hurricanes and tornados
- Manmade disasters, such as terrorist acts
- Routine power outages

## WHAT HAPPENS WITHOUT IT

### ANNUALLY

Outage costs to society amount to **$119 billion**

Power interruptions to U.S. electricity consumers cost **$79 billion**

### IN ONE HOUR, the revenue lost:

For a third of businesses would exceed **$50,000**

For a major corporation can range up to **$6.5 million**

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## *Sources used in the creation of this infographic include:*


NFPA 110 (Standard for Emergency & Standby Power Systems)
NFPA 101 – Life Safety Code
NFPA 70 – National Electrical Code
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