

## DATA CENTER OPERATOR & MANAGED SERVICES PROVIDER

POWER SOLUTIONS  
CASE STUDY of  
**PEAK 10, INC.**

### UNITS

2000+ kW Modular  
Power Systems  
(4 x 500 or 600 kW  
Gensets in Parallel)

### LOCATIONS

Charlotte, North Carolina  
Jacksonville, Florida  
Tampa, Florida  
Cincinnati, Ohio  
Nashville, Tennessee  
Atlanta, Georgia



## MPS ENSURES PEAK PERFORMANCE AND 24/7 RELIABILITY FOR LEADING DATA CENTER

In today's world, reliable data is the lifeblood of business. Many companies depend upon high speed systems that process and store data in a variety of ways, as well as lightning-fast networks that give users instant access. Internal resources are often insufficient to meet an enterprise's data needs, causing them to partner with a company that offers comprehensive solutions.

Peak 10, Inc. is America's leading independent data center operator and managed services provider. Its services allow companies to lower costs, improve service levels, meet regulatory requirements and increase revenue growth by maximizing internal IT resources and ensuring the security and availability of a complex technology infrastructure. Its array of services includes:

- **Data Center Services** - providing hardened infrastructure and scalable solutions including colocation, bandwidth and Metro Ethernet that lower costs and maximize internal resources.
- **Managed Hosting** - offering the management and monitoring of operating systems and

applications, patch management, managed backup, and reporting. Complete with a highly-available core network, redundant enterprise firewalls, access layer switches and electrical circuits to each server.

- **Disaster Recovery** - supplying reliable services and complete redundant architecture with automatic traffic redirection and hot site mirroring to offer a more complete business continuity solution.
- **Cloud Services** - providing customizable solutions in a private or enterprise format, coupled with expertise that allows companies to leverage the power of the cloud based on their specific needs.

To provide these and other services, Peak 10 owns and operates numerous high-performance data centers. All data centers are engineered with multiple levels of security, uninterruptible power, redundant HVAC systems, fire suppression and around-the-clock monitoring and

“All Peak 10 systems are mission critical, so redundancy is essential,” said Jeff Biggs, Executive Vice President and Chief Technology Officer, Peak 10. “Generac’s MPS provides N+1 redundancy at a fraction of the cost of multiple large generators in a traditional paralleling configuration.”



# DATA CENTER OPERATOR & MANAGED SERVICES PROVIDER

POWER SOLUTIONS  
CASE STUDY of  
**PEAK 10, INC.**

management. Peak 10 selected Generac's Modular Power System (MPS) to provide full backup power coverage at several of its data centers in the event of an extended utility power interruption. Working with National Power Corporation, the Generac Industrial Power dealer in Charlotte, N.C., Peak 10 installed an MPS at its data centers in Charlotte; Jacksonville and Tampa, Fla.; Cincinnati, Ohio; Nashville, Tenn.; and Atlanta, Ga.

Peak 10 cited the advantages of redundancy and scalability in an MPS as key to its decision to choose Generac.

"All Peak 10 systems are mission critical, so redundancy is essential," said Jeff Biggs, Executive Vice President and Chief Technology Officer, Peak 10. "Generac's MPS provides N+1 redundancy at a fraction of the cost of multiple large generators in a traditional paralleling configuration."

Generac's onboard paralleling system allows the MPS to combine the output of two or more generators without the complexity or cost of traditional paralleling equipment. If one generator fails, the most critical loads are redistributed among the other units in the system, significantly improving reliability. Given typical applications and load factors, the load requiring the highest degree of reliability is often only a fraction of the total generation capacity. As such, redundancy is achieved without the addition of costly under-utilized generators.

Increasing the capacity of an MPS is as simple as adding another modular generator. Most of the Peak 10 sites feature four 500 or 600 kW MPS diesel gensets, with room for an additional unit as capacity needs increase.

"Serviceability is better, too, because we can take a unit offline for service and still have full capacity," Biggs said. "And because MPS uses smaller, more common engines, service is easier and parts are more readily available than for larger, more specialized generators."

The use of common engines also results in shorter lead times. "Generac provided a means of acquiring our needed capacity in a short time frame—just 18 weeks compared to a full year for systems from other manufacturers," Biggs added.

Modular Power Systems can be configured using 100–600 kW diesel, gaseous-fuel or Bi-Fuel® generators, allowing for solutions ranging from 200 kW to 6 MW. The flexibility of MPS allows generators to be arranged side by side, end to end, in separate locations around a building or even on a rooftop—a real advantage if space is limited.

Peak 10 has found MPS to be a very effective solution for its standby power requirements. "The units are very fast to start up and parallel," Biggs says. "During commissioning we run each system at 110% of the nameplate load, so we know they can deliver all the power we need."

## UNITS

2000+ kW Modular  
Power Systems  
(4 x 500 or 600 kW  
Gensets in Parallel)

## LOCATIONS

Charlotte, North Carolina  
Jacksonville, Florida  
Tampa, Florida  
Cincinnati, Ohio  
Nashville, Tennessee  
Atlanta, Georgia

# GENERAC®

Generac Power Systems, Inc.  
S45 W29290 Hwy. 59  
Waukesha, WI 53189  
1-888-GENERAC (1-888-436-3722)