

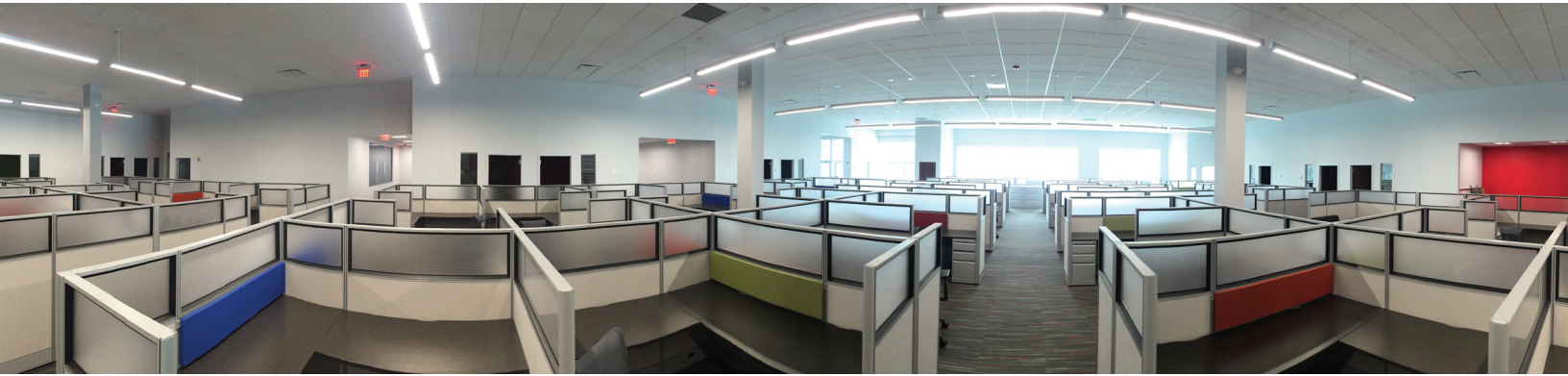
Commack Data Center: State-of-the-art Infrastructure as a Service

mindSHIFT Technologies 500 Commack Data Center is a new, multi-million dollar facility that provides world class infrastructure services to support complex IT and cloud demands.

Located in Commack, New York, this new data center provides unmatched systems performance, high security, superior connectivity, greater uptime, and more redundancy to facilitate the growth and success of our customers.

The facility features 6 megawatts of electrical capacity, 2N Uninterrupted Power Systems (UPS), advanced cooling technologies, N+1 emergency generator support, 20,000g fuel tank for emergency support, connectivity with multiple fiber providers, with multiple points of entry, and advanced fire suppression clean agent systems, with N+1 redundant support.

Whether you engage with mindSHIFT to host your critical applications, outsource your data center, manage cloud infrastructure, or for offsite disaster recovery, the Commack Data Center will satisfy the most demanding requirements.



Redundancy

- **Concurrently Maintainable Site Infrastructure.** As defined by the Uptime Institute, a concurrently maintainable data center has redundant capacity components and multiple independent distribution paths serving the computer equipment. This means there is sufficient permanently installed capacity to meet the needs of the site when redundant components are removed from service for any reason.
- All IT equipment is dual-powered and every capacity component and element in the distribution paths can be removed from service on a planned basis without impacting any of the computer equipment.

Connectivity

- Diverse telecommunication paths into the data center significantly reduce the risks associated with only a single route to the data center
- Cutting-edge technologies allow failover to a backup connection in milliseconds in the event of a fiber cut, avoiding any perceived interruption

Size & Capacity

- **Built for growth.** The Commack Data Center was designed to accommodate the rapid growth of our customers. Up to 20,000 ft² of raised floor and additional office space is available in phased buildouts.
- POD1 buildout features 8,000 ft² of floor space, 400 rack capacity and 2.6 megawatts of incoming utility
- POD2 buildout – will feature 7,000 ft² of floor space, 335 rack capacity and an estimated 3.5 megawatts incoming utility

Power

- All power into the data center is fully redundant, starting with dual connections from separate substations
- Underground 13.2kV primary service
- Total isolation A & B power distribution paths
- Individual LSIG breaker micro-logic trip units, providing fault isolations
- Electronic transfer switching, using PCI logic controls
- Individual branch breaker isolation and reporting capabilities

Backup Emergency Power

- The data center features N+ 1 generators that exceed continuous Tier III rating standards and is designed not to limit consecutive hours of operation when commercial utility is disrupted
- Redundant fuel pumping system from primary underground fuel storage tank to reserved installed day tanks on each unit; providing N+1 system

Fuel capacity

- 125 hours (5+ days) of onsite fuel storage (at full load) that support backup generators which far exceed Tier III standards for data centers
- Sophisticated fuel polishing system, that maintains proper nutrients, eliminating all containments, fuel breakdown, and moisture buildup
- Multiple fuel vendor contracts for fuel delivery services

Mechanicals

- High efficient cooling system using economization technology, providing six-eight month 'free cooling' mode. (Full economization = the economizer is handling the load with no compressor power, thus reducing overall costs and increasing efficiency levels)
- 2N redundant cooling system

Fire Protection

- FFAST Air Sampling Technology – (Fire Alarm Aspiration Sensing Technology) uses an advanced, intelligent smoke detector that actively draws air into its sensors for early warning detections
- Fire suppression system that uses clean agent gas FK-5-1-12 (aka Novec 1230 Sapphire)

- Lowest environmental impact of all the chemical clean agents
- System designed to provide full 2N redundant clean agent coverage, throughout the data center and power rooms, in the event of a discard of the primary source

Monitoring

- Fully functional Building Management System (BMS), coupled with enterprise Emergency Power Monitoring System (EPMS) offers total visibility at every component layer of the electrical and mechanical infrastructure
- Built-in intelligence to respond to conditions and ability to turn on and off redundant mechanical systems
- Hi-tech dashboard visuals, with advanced smartphone alerting capability
- Complete visualization of power devices enables staff to immediately view and flag any abnormal power condition, and detect and report on load levels on a given upstream or downstream breaker

Security

- Advanced physical security systems, combined with mindSHIFT access policies restrict entry to data center
- Dual authentication security checkpoints at critical entrance locations
- Innovative, secured customer cabinets offer alerting, tracking and recording functionality and remote notifications as an option.
- Video surveillance complies with PCI standards

mindSHIFT's Strength

Of the more than 900 people who work at mindSHIFT, 85% are engineers, technology consultants, architects, business analysts and developers who, as a group, hold over 200 cross technology certifications in Windows, networking, cloud, virtualization, database, communications and various application technologies.

This is mindSHIFT's strength, and how we ensure your project is done right the first time, on time and within budget.

Delivering IT Peace of MindSM is mindSHIFT's slogan because it's how we serve customers every day.



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