Data Center Facility Information and Specifications

The University at Albany Data Center is an Uptime Institute Tier III (concurrently maintainable), LEED-Gold (energy efficient) certified facility.

Space

Approximate Square Footage

- 26,800 sf dedicated to DC and DC support
  - 5,400 sf raised floor area
  - 2,200 sf M/E galleries along data center
  - 19,200 sf M/E support rooms

Potential Rack Space:

- Up to 160 racks

Power

- 450kW critical power (Phase 1); Design provision for additional 225kW critical power (Phase 2)
- Dual feed power distribution for complete redundancy
- Multi-room power distribution (main, transformer, generator-parallelizing switch gear, switch gear, distribution and house)
- NYS Niagara to Mohawk Valley transmission corridor; fast recovery capability
- Dual transmission (115kV) feeds, geographically separated ring configuration from 2 sub-stations (Woodlawn (West), Menands (East)); including medium voltage (to 13.8kV) transformers at each
- Power conditioned at substation
- Power to raised floor conditioned by UPS
- UPS run-time - 10 mins under full load
- 800 kW firm continuous capacity generator support (2 generators @ 1,000 kW stand-by, 800 kW continuous rated, N+1)
- Each generator equipped with 2-1200 gallon fuel tanks to provide 12 hours of run time
- Generators connected to campus central plant fuel tank farm (3-100,000 gallon tanks), capable of providing additional 9 days of run time with frequent fuel turnover, ensuring high quality supply
- Dual cabinet mounted smart pdu's with monitoring and management capability

Cooling

- 2 - 380 ton chillers w/ 2 -380 ton water cooling towers (380 tons capacity @ N+1)
- 8 CRAH units (Phase 1); Design provision for 2 additional CRAH's (Phase 2)

Fire Suppression

- Air Sampling Smoke Detection (ASSD) system
- Pre-action, dry pipe sprinkler system
- Clean agent fire protection system using Sinorix (NOVEC) 1230 above and below raised floor
- 2 hour Firewall separation between data center and mechanical/electrical spaces

Security

- Swipe card access
- Biometric Hand Geometry Reader
- Video cameras
- The IT Building is a secure facility. The main door is locked 24x7, with interior office suites locked between 5:00 PM - 7:30 AM. All visitors must be scheduled, accounted for, and escorted while they are in the building

Construction Elements

- Bolted stringer raised floor under structure
- All steel raised floor access panels
- 2000lb concentrated/1500lb rolling raised floor load tolerance
- Reinforced concrete, pre-cast exterior walls

Additional Facts
• Provided BMS (Building Management System)
• Provided EPMS (Electrical Power Monitoring System) and BCMS (Branch Circuit Monitoring System)
• Secure storage
• Receiving Dock
• Set-up/test/development area
• Hot/cold aisle configuration on 36"raised floor
• Separate “galleries” containing mechanical-electrical equipment
• EPDM roof construction, center peak sloped to edges with perimeter overflow scuppers
• Equipped with humidity sensors and leak detection above and below raised floor
• Redundant and physically separated ISP paths and access to raised floor
• Chatsworth Globalframe IT Cabinets - 45U, 31.5" W X 47.2" D, X 84.4" H

Need more help? Contact the ITS Service Desk.