

Facility:	Location:
West Data Center Phase II	Papillion, NE
Project Type:	Duration:
Off Site Construction – Data Center	Phase I – (11) Months / Phase II – (10) Months

PROJECT OVERVIEW

- (2) Tier 4 Modular Data Centers, (1) MW each, Built Separately.
- 14,000 Sq. Ft. raised floor (1500 kW). 4,000 Sq. Ft. non-raised floor white space (500 kW).
- Three stories Electrical on 1st floor, white space on 2nd and mechanical on the roof.
- Phase I was live (14) months before Phase II began installation.
- Each phase was separated by thermally rated wall to maintain full operation of Phase I during Phase II installation, start-up, testing and commissioning.
- (16) CRAC units per phase. Each CRAC unit is supported by a condensing unit located on the roof including pumped refrigerant economizers on custom skids, providing 592 tons of cooling. Installed with no roof penetrations. All penetrations for refrigeration lines were made in the side of the wall.
- Two separate electrical rooms (A and B) per phase, each with (4) 550 kVA UPS'. In total (4) IT UPS' and (4) Mechanical UPS' per electrical room, per phase.
- (3) battery cabinets for each IT UPS and (2) battery cabinets for each Mechanical UPS. Each cabinet holds (30) batteries for a total of (600) batteries per phase. Each provides battery backup, IT run time 17 minutes, Mechanical run time 15 minutes, avoiding UPS downtime.
- Two generators are located on the exterior of the building. Each generator is a (2) MW capacity with supporting gear, Tier 4 generator. (2) generators per phase.
- BMS controls and monitoring for both Mechanical and Electrical. All scalable platforms.
- Fully secured facility with badge access for all entrances and several cameras throughout. Phase II included full security room.
- Fire alarm and Sprinkler Facility is fire protected by a pre-action sprinkler system. All services were an extension of the Phase I build. No new services were needed for Phase II.
- White space has clearance of 12+ feet in height and double tier cable tray
- Hardened shell Exterior and roof top equipment are rated for 165 MPH wind loads
- Modular Construction reduced schedule and site time by four months. This greatly reduced site man power needed for the build.
- Possibility to scale out to (9) MW for a site wide build.
- Total modules Phase II (35) modules including (5) custom mechanical skids, (10) exterior brace frames. Build time to dry in (15) Days. Ready for permanent power (10) weeks from first module set. Electrical and Mechanical Started/Tested and Level 5 Commissioned (9) weeks from Permanent Power.



JOB FACT SHEET

JOB PHOTOS



Upper Level Core



521 Banner Avenue Greensboro, NC 27401

336-273-1975

Lower Level Core



Exterior



Rooftop



CRAH Gallery