



New Data Center UPS

*University of Kentucky Medical Center
Lexington, Kentucky*

Owner

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Contact

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Cost

\$350,000



This project consisted of a large capacity expansion for the University of Kentucky Medical Center data center. Due to higher density equipment and expanded digital services the existing data center UPS system was loaded to capacity. This project doubled the uninterruptible power availability in the ITS room and provided requisite cooling to support new equipment.

A new 160KW static UPS system and power distribution unit was installed in a storage space adjacent to the ITS room. Power was provided from the Medical Center critical system transfer switch via a separate distribution pathway to provide some redundancy. Power distribution was underfloor, which required excavation of the existing slab.

Two 22 ton and two five ton computer room air conditioning units were added to the facility for supplemental cooling and humidity control. These units were connected to drycoolers located on the hospital roof four floors above.

Careful coordination during design and construction allowed the piping to be run vertically with minimal impact on other occupants and existing systems. The installation of the new units and the demolition of existing equipment were staged to allow the data center to operate at full capacity during construction.

The new and existing cooling units within the data center are interconnected to allow load sharing and staging to match the needs of the space. Multiple temperature sensors are placed throughout the space to minimize the effects of hot spots.

All UPS and cooling units are monitored by the University's digital control system.