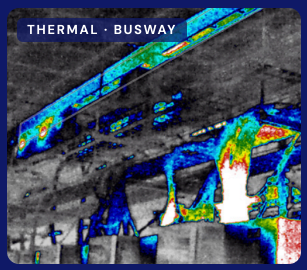
MultiSensor AI

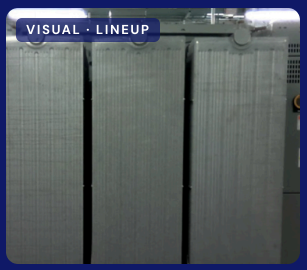
CUSTOMER CASE STUDY

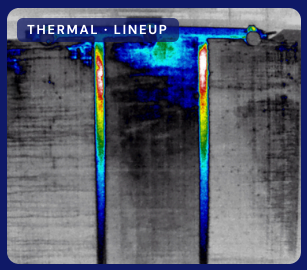
Data Center Thermal Monitoring

After a costly thermal event, a major data center put its critical power under continuous watch.

A major data center deployed MultiSensor AI's multi-sensor condition intelligence on the power path that keeps its servers running: UPS corridors, switchgear, and power distribution. The system detects thermal anomalies in real time, 24/7, on equipment that annual inspections see once a year.







14
Fixed-mount thermal sensors on UPS corridors and switchgear

Up to 8
Regions of interest watched by each sensor

24/7
Continuous thermal monitoring with automated alerts

Above
Works above BMS and DCIM, not instead of them

THE CHALLENGE

The data center experienced a costly thermal event with no early warning.

The site relied on calendar-based inspections, so degradation on its power equipment developed unseen between rounds, and the team learned about failures after they happened.

THE SOLUTION

To guard against future incidents, the facility partnered with MultiSensor AI on asset reliability. MSAI installed **14 fixed-mount thermal sensors**, connected through the MSAI Hub to MSAI Connect, each watching up to **eight regions of interest** on UPS and switchgear, with 24/7 monitoring and automated alerts.

It operates above BMS and DCIM, not instead of them. Reliability teams also use it on cooling equipment to reduce maintenance-related downtime, with real-time notifications and historical trending for audits.

THE RESULTS

Real-time thermal alerts

The system alerts the team when a thermal anomaly develops on monitored equipment, improving response times and situational awareness.

Visibility between inspections

UPS corridors and switchgear are now trended around the clock instead of checked once a year, with historical data the team can use for audits.

Automated incident workflow

The team now receives automated alerts, shifting from passive monitoring to active intervention. Future plans include deployment at their southern US sites.

MultiSensor AI closes the visibility gap. That means earlier detection of degradation, and time to get ahead of unexpected, high-cost failures.

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