

3-Phase Transformer Monitoring for Critical Loads

Ensuring Reliable Power for Commercial and Industrial Customers



61%

Share of U.S. electricity consumption by commercial (35%) and industrial (26%) users.

[US Energy Information Administration](#)

\$150M

Loss by Delta Airlines after losing power at their Atlanta operations center in 2016.

[CNN](#)

\$150B

The annual cost to businesses from power outages.

[U.S. Department of Energy](#)

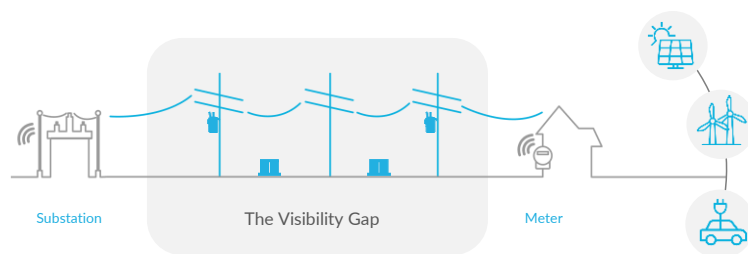
3-phase transformers serve essential customers such as hospitals, factories, agriculture and data centers and are often the most expensive asset in the distribution system. They are part of the invisible grid, often below grade or in vaults.



Grid Visibility is Essential to Predicting and Reducing Critical Load Outages

Significant Blind Spot

Visibility Gap Between the Meter and the Substation



Faulty or aging transformers cause **70%** of outages on the grid, downtime, and service costs.

Addressing these challenges with 3-phase transformers requires:

- Transformer situational awareness - upstream, downstream, and in the transformer itself
- Capacity for multiple primary feeds in grid loop configurations
- Analysis to spot anomalies
- A continuous high-speed sampling of voltage and current waveforms
- Condition-based asset management

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UbiGrid DTM+ Makes 3-Phase Transformers Smarter and More Visible

- Installed on 3-phase pole or pad-mounted transformers with the capacity to handle up to six primary feeds in a grid loop configuration.
- Collects and sends transformer and grid performance data over an LTE network to UbiVu cloud-based asset management system.
- UbiVu uses predictive analytics, reporting, and visualization to eliminate the visibility gap.
- Built with open APIs that allow you to integrate data into existing Grid Operations and OSS systems.



UbiGrid DTM+ Delivers Greater Visibility to Predict and Prevent Critical Load Outages



Asset Health Awareness

User-friendly real-time health snapshot of critical assets, including pressure, voltage, and transformer utilization.



Predictive Analytics

Powerful artificial intelligence spots anomalies or leading indicators of a potential fault.



Grid Situational Awareness

Visualize all primary and secondary feeds, detect faults and distressed assets, and identify issues such as harmonics from EV charging.



Operational Intelligence

Enables you to move to a condition-based asset management strategy to avoid unnecessary truck rolls and inefficient O&M programs.

Using Data Science to Predict Outages

Ubicquia developed algorithms based on extensive data analysis to detect dielectric breakdowns up to 27 days before transformer failure.



About Ubicquia

Ubicquia® creates intelligent infrastructure platforms that are compatible with the 360 million streetlights and 500 million transformers that line our streets. They deliver energy savings, enhance public safety, bridge the digital divide, and improve grid resiliency. Ubicquia products are deployed by more than 700 customers including some of the largest cities, utilities, and mobile operators across North America. To learn more visit www.Ubicquia.com or contact us at info@ubicquia.com