

SENSORS FOR PREDICTIVE MAINTENANCE

Small and powerful, our sensors help companies reduce outages and lower costs.

The last thing a power company wants is a forced outage caused by malfunctioning equipment. Yet, power cycles are increasing at the same time the number of trained operators available for specialized maintenance and repairs is decreasing. Automated temperature monitoring helps companies prioritize work and take action when needed

Maintenance at scale

Power companies have hundreds of thousands of assets to monitor and maintain to avoid damage to the power grid. They include generators, generator circuit breakers, line disconnect switches, step-up and step-down transformers, segregated and non-segregated bus ducts, potential transformer cabinets, medium voltage switchgears, and motors. Systems are subject to excessive loads, normal wear and tear, and challenging environmental conditions which can cause thermal or electrical breakdown. When equipment wears out or cables split due to overheating, they can cause fires.



Accurate, cost-efficient data collection

In addition to unhappy customers and lost revenue, power companies have the potential to **lose an average of \$1.26 M in revenue** over a 7-day period if a 500MW generator goes down due to a forced outage. Utilities typically rely on employees to check cable conditions by hand. Most rely on thermal cameras and perform spot checks. Though resource intensive, data collection is not always accurate and at best, irregular. In contrast, smart sensors can check a greater number of locations and report back every few minutes



Detect abnormalities immediately

When sensors detect a temperature change on a critical asset, operators see a spike in their dashboard. They can react quickly to rebalance or replace the asset before any damage is done. Instead of employees descending underground to perform tasks or shut down systems, utilities can identify issues before they cause problems.



Why Disruptive Technologies Sensors

First-generation sensors were bulky, complex and often inaccurate. We've completely rethought sensor design to enable data collection anywhere and everywhere.

There's no need to "rip and replace" legacy systems to turn them into "smart" equipment.

- Mini-sensors are the size of a postage stamp
- Low power consumption means long battery life (up to **15 years**)
- Robust construction
- Cost efficient
- Direct connections provide maximum accuracy
- Industrial-grade connectivity and built-in redundancy
- Supports next-generation Internet of Things (IoT) networks
- End-to-end security built into the design
- Extensible platform to integrate into your systems



CONTACT US TO LEARN MORE

Sensors anywhere. Insights everywhere.

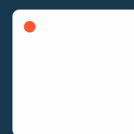
Disruptive Technologies is a rapidly growing innovator in the IoT market and developer of the world's smallest commercial-grade wireless sensors. Our sensing solution based on these mini-sensors simplifies data collection and delivers the data securely to our partners' analytics programs in the cloud.

Leading-edge companies build radically different smart solutions on our platform for Industry 4.0, commercial real estate, retail, food service and safety, and connected living applications. Together we enable facility managers to maximize space and keep tenants happy, pharmacists to ensure drugs don't spoil, and engineers to protect critical assets. From predictive maintenance to proper refrigeration, we're connecting people and information to deliver Connected Change™.

To learn more, visit www.disruptive-technologies.com

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