LineVision Grid Solutions

LineVision is the leading provider of grid monitoring solutions that help utilities rapidly unlock transmission capacity, enhance grid resilience, and meet the demands of the new energy economy. LineVision's patented non-contact sensors collect critical information to unlock additional capacity on existing lines, provide insight on conductor health, and detect anomalies and risks, including conditions that can lead to wildfires.

LINEVISION LUX

LineVision LUX™ is the most widely installed non-contact sensor transforming the way transmission lines are monitored. Mounting quickly and securely to transmission towers rather than to live lines dramatically increases the safety, operational efficiency, and accuracy of data models without interfering with lines.

Conductor Measurement

LUX sensor captures conductor position on all phases, even bundled conductors

Weather Measurement

LUX sensor captures hyper local wind speeds and meteorological conditions

Advanced Analytics

Wind forecasting and measurements enhanced with computational fluid dynamics (CFD), digital twin models

LINERATE

Quickly & Safely Increase Transmission Capacity by up to 40% with Dynamic Line Ratings

Dynamic Line Rating (DLR) uses sensors to monitor the ambient weather conditions that heat or cool transmission lines to continually calculate their true capacity. LineVision's DLR often allows significantly more power flow than a static or ambient adjusted rating and has helped utilities integrate large loads such as factories and data centers, reduce congestion for additional generating resource integration, and bolster system reliability around the world.

LineRate features the industry's most accurate DLR calculations, leveraging computational fluid dynamics and sensor-based data that is continuously refined using machine learning.

- 240 Hour (10 Day) Dynamic Line Ratings
- Emergency Ratings
- P-Value with Custom Risk Profile
- NERC-CIP EMS integration
- FERC 881 Compliance
- Facility Ratings Management

LINEAWARE

Safeguard Your Grid From Extreme Weather and Conductor Anomalies

Less than 1% of transmission lines are monitored beyond the substation today. As the severity/frequency of wildfires and extreme weather accelerate, utilities face rising insurance costs, reliability concerns, and public scrutiny. Continuous monitoring and predictive analytics can mitigate risks, build contingencies & prioritize maintenance. LineAware enables utilities to enhance grid reliability and mitigate risks by leveraging best-in-class modeling and non-contact sensors through 3 modules.

Wildfire Risk Visibility

Receive additional data to inform wildfire mitigation strategies and assess risk during weather events

- ROW wind measurements using weather stations
- 30 M resolution wind forecasts
- Custom thresholds and alerting

Conductor Behavior

Observe conductor behavior over time and receive alerts on anomalies

- Monitor conductor behavior over time.
- Monitor precipitation, humidity, and temperature
- Custom thresholds and alerting

Icing Risk & Detection

Receive alerts on the risk and observance of ice accumulation on transmission lines

- Proactive alerts of icing risk
- Alerts for detected ice accumulation

LINEHEALTH

Analyze Conductor Health and Prioritize Maintenance of Critical Assets

Monitoring the health of transmission lines helps to ensure grid reliability and prevent costly failures. Early detection issues like sag, overheating, or mechanical weaknesses reduces the risk of outages and damage. These insights help steamline O&M budgets, defer expensive upgrades, and prioritize maintenance.

LineHealth can detect if conductors have signs of:

- Annealing - Reduced rated breaking strength & accelerated end-of-life
- Elongation - Increased sag & reduced maximum operating temperature
- Tension Deviations - Increased risk of aeolian vibration and NESC violations

LineVision is proudly based in Boston, MA

Learn more at LineVisioninc.com

LineVisionInc.com
info@LineVisionInc.com