

SONICSENSE® WIND

Blade Monitoring acoustic and
real-time lightning strike alerts.



An autonomous smart sensor solution designed to monitor the structural health of your blades in real time, capture early acoustic, vibration anomalies, and instantly report lightning strike events.

Why Choose SonicSense® for Your Wind Farm?

Early Structural Defect Detection

- Continuous, real-time acoustic analysis enables the monitoring of changes in the acoustic signatures of the blades in order to detect structural anomalies before they lead to a serious operational failure.

Instant Lightning Strike Alerts

- Built-in intelligent algorithms instantly process lightning signatures, enabling an estimate of the strike distance. An alert and signal are sent in the event of a nearby strike to facilitate a field response.

Zero Cables & Complete Autonomy

- 100% wireless design powered by an internal long-life industrial battery (up to 4 years lifespan), enabling straightforward field retrofits without impacting turbine electrical systems.

Agnostic Network Integration

- Built with a versatile, future-proof communication layer.

Native Integration in Blade Manager

- All continuous sound trend insights and event alerts automatically synchronize into Cornis's unified Blade Manager platform for single-panel asset optimization.



Optimize Your Noise &
Vibration Management
with Acoustic monitoring!



Precise, non-intrusive
inspection for better
turbine health and reduced
environmental impact.



Contact us for
a demo!
contact@cornis.fr

PRODUCT OVERVIEW & INTELLIGENCE

The SonicSense Wind® device is an ultra-rugged, autonomous system built to withstand harsh environmental conditions. Featuring dual-core onboard computing power, it performs advanced A.I processing directly on the turbine.



Intelligent Filtering: The sensor will isolate the acoustic signature of the blades in order to identify the noise produced by each individual blade.



Smart Event-Driven Reporting: To optimize power consumption, standard operations run fully on the edge; audio samples and rich data alerts are transmitted to the cloud only when a specific structural anomaly or lightning threshold is crossed.

Essential Specifications



Technology:

Smart acoustic monitoring with edge-computed digital signal processing (DSP).



Connectivity:

Wireless connected sensor architecture (Wifi, IoT,...)



Power Source:

High-capacity internal battery pack up to 4 years of autonomous operation depending on configuration. External DC input option (5-24V) available.



Environmental:

Ultra-lightweight polycarbonate housing (160g), IP66 weatherproof rating, operational temperature range from -25C to +85C.



Installation:

Non-intrusive, rapid mechanical attachment via magnetic mounts (no drilling, no welding required).