



The detection system that protects bats while optimizing wind energy production!

Solutions & expertise

High- performance solution :

- 24/7 **acoustic detection (15–150 kHz)**
- Dynamic **hybrid** curtailment
- **High-sensitivity** multi-target detection with no species limitation
- **Scalable** and adaptable system
- **Reduction** of unnecessary curtailments

Ornithological expertise :

- **Support** from chiropterologists
- **Analysis** of recordings & spectrograms
- **Optimization of settings** and reduction of parasitic noise

Technical expertise:

- **integration** (Modbus, OPC UA, TOR)
- **SCADA Data** Analysis
- Technical optimization **recommendation**
- **Comparative modeling** of threshold-based curtailment vs. dynamic curtailment

Performance & safety

Mastering performance :

- **Monitoring of availability rate**
- **Recordings and spectrograms** available
- **Number and duration of curtailments** available upon request

Maintain availability :

- **Supervision** of system operation & interactions with the wind turbine
- **Automatic alerts** in case of anomaly (hardware/software)
- **Anticipation** of hardware failures

Cybersecurity :

- **Storage with guaranteed** data accessibility
- **Enhanced security** (firewall, VPN)
- **Ongoing support** via a dedicated team

A tailor-made service

- **Specific configuration** to meet customer needs and regulations
- A **scalable solution** to meet each of your challenges
- **Custom installation** based on regulatory issues

Low maintenance cost

- **Robustness and Durability** : Low replacement rate of wear parts
- **Remote maintenance**

Customer Service

- **Personalized support** according to the **needs** of the park (ornithological and regulatory techniques)
- **Hotline**
- **Dedicated contacts**

Technical Specifications and Equipment

Material:

- ✦ 1 to 3 SM4 type microphones
- ✦ 1 **SMART** identification module
- ✦ 1 **central processing unit**



Options

4G & Satellite Network / FO-RJ45 Converter

Technical characteristics :

- ✦ **Mounting via drilling or magnet**, with stainless steel clamping.
- ✦ Industrial equipment compliant with **CE standards**
- ✦ **IP67** microphone
- ✦ Resistance to extreme temperatures from **-30°C to 47°C**

Protective measures

- ✦ **Curtailment**
- ✦ **Chiropterological approach:** Adjusting curtailment settings according to the bat species observed on site
- ✦ **Incorporation of environmental data** into threshold-based curtailments

Installation & support

- ✦ **GWO-certified** installers
- ✦ **Compatible with all turbine manufacturers** (Vestas, Nordex, Siemens, etc.)
- ✦ Post-installation follow-up, with **immediate and precise installation checks**
- ✦ **Training** of service providers

High-flying species



Low-flying species