Use case: Sound Event Detector for Drone Detection

JALUD's innovative **Sound Event Detectors** (SED) use advanced audio analytics to **detect the unique sounds of drones in real-time.**

Strategic Advantages

- Significantly lower costs compared to traditional radar systems
- High accuracy in drone detection
- Rapid deployment and easy installation
- Integration capability with various security and defense systems
- Passive detection ensures resistance to jamming and electronic warfare
- Fast detection enables immediate response to drone threats

Proven Deployment

- Applied in cities and industrial zones
- Tested under demanding military conditions
- Operational availability with high reliability

Technical Specifications

- Detection range up to 250 m
- High accuracy
- Fast response time
- Easy installation

Comparison of Technologies

Category	SED 🟢	Radio Detectors 🟡	Traditional Radar 🔴
Initial Investment	Low	High	High
Operating Costs	Minimal	High	High
Deployment Speed	Immediate	Long-term	Long-term
False Alarms	Minimal (AI-driven)	Frequent	Frequent
Energy Consumption	Low	High	High

Drone Testing – Ministry of the Interior (Czech Republic)

- All drones are custom-built (not standard commercial models such as DJI).
- This means none of the drones can be detected using standard RF detection systems.
- Drones were equipped with various types of propellers.
- Detection rate: 100% – effective up to 200 meters.

  Photos from official testing (next page)

Use Cases *(Application Scenarios)*

Defense – Military	• Border and large-area protection • Perimeter security of military bases and facilities • Protection of critical infrastructure • Support for mobile security units
Industrial Security	• Perimeter protection of production facilities • Protection of critical infrastructure against espionage
Public Safety	• Monitoring of urban areas • Protection of public events and gatherings
Private Sector	• Protection of private properties • Security of corporate complexes
Healthcare	• Protection of hospital facilities against unauthorized surveillance • Security of heliports and landing zones