



SAĞLAMTEK
Havacılık & Savunma A.Ş.

ADTS



ACOUSTIC DRONE DETECTION SYSTEM (PASSIVE RADAR)

Optimized for full control in residential areas where radar and optical systems are insufficient, a 360-degree acoustic shield against airborne threats.

FEATURES

Advanced Detection Capacity:



With advanced artificial intelligence algorithms, the detection distance varies depending on the type and sound intensity of the drone. While it detects fixed-wing drones with a length of 2.5 m from a distance of 2.5 - 3.0 km, it can detect rotary-wing drones with a length of 80 cm from 700 meters.

Angular Accuracy and Coverage:



360° Full Coverage | 5° Angle Precision

Dynamic Operational Capability:



Uninterrupted tracking behind buildings and in blind spots (Under 500m)

Artificial Intelligence Integration:



Instant diagnosis via motor/propeller frequency analysis

Operational Durability:



12+ Hours uninterrupted battery life



DETAILED CAPABILITIES & SYSTEM ARCHITECTURE

Detection That Knows No Obstacles

Utilizing the diffraction property of sound waves, the system detects drone threats coming from behind buildings, narrow streets, or crowded environments at a much earlier stage, before radar systems can even see them.

Blind Spot Eliminator

It offers uninterrupted monitoring, target-oriented continuous tracking, and full control over the airspace at close ranges under 500 meters, where radars often become "blind" due to signal clutter.

AI and Continuous Learning

Characteristic signatures unique to drone motor and propeller sounds are distinguished within seconds using advanced AI algorithms system can continuously increase its detection capabilities from command and control centers by being trained with new data against evolving drone

technologies.

Mesh Network and Data Transmission

Devices operate in an integrated manner by establishing a wired or wireless mesh network among themselves. All detected acoustic data is instantly transferred to a single command center

Rapid Deployment and Complete System

It operates with a "Plug-and-Play" logic for field operations. Thanks to the Acoustic DroneDetection Device and the Drone Detection Indicator Unit, instant tracking is performed via tablet or computer. Its lightweight structure and professional mounting apparatus make it mission-ready within minutes.

Portable and Fixed ADTS Versions

Depending on the requirement, a portable version for mounting on vehicles or military equipment, or a fixed version for buildings and border lines, can be preferred

Detection and Identification

Detection range varies based on the type and sound intensity of the drone.

FEATURE	VALUE
ROTARY-WING DETECTION RANGE	Continuous tracking of drones (~80 cm wingspan) up to 570m; detection up to 700m.
FIXED-WING DETECTION RANGE	Detection of internal combustion fixed-wing drones (~2.5m wingspan) from 2.5 to 3.0 km.
DETECTION ANGLE	360 Degree Full Coverage
ANGLE PRECISION	5 Degrees
DETECTION FREQUENCY	0.4 - 2 kHz
OPERATING TIME	12+ Hours Uninterrupted Operation
DIMENSIONS	Fixed Version: 20x20x20 cm Mobile Version: 10x10x10 cm
TRAINING AND ADAPTATION	Detection features can be enhanced by training with new data against evolving drone technologies.

