

PASSIVE OMNIDIRECTIONAL DETECTOR

The system shall support simultaneous detection of no fewer than 90 UAVs; identification of at least 35 UAV types; and identification of no fewer than 12 types of UAV remote controllers.



WATERPROOF
IP66



DISTINCTIVE ADVANTAGES

- **Successful Detection**
Detection Success Rate $\geq 99\%$.
- **High-Precision Measurement**
Ranging error ≤ 20 m when detecting a target UAV at 8 km under clear line-of-sight and low-interference conditions.
- **Trajectory Display**
Detected UAV flight trajectories shall be displayed on the control platform.
- **Passive Detection**
The system shall not transmit radio signals while in detection mode.



PASSIVE OMNIDIRECTIONAL DETECTOR

The HDNT-1 provides critical intelligence on drone make, model, protocol, and vendor by detecting both control signals and video transmissions between the drone and its operator. It is also capable of determining the direction of the detected signal. When deployed in a scalable network with multiple sensors, this directional data enables accurate triangulation of the drone's or pilot's geolocation. Integrated with jammers and other countermeasures, the system delivers comprehensive situational awareness and a robust counter-UAS electronic warfare capability.

The HDNT-1 installs in minutes with flexible mounting options—on buildings, poles, trees, or tripods. Powered by PoE and seamlessly network-ready, it delivers fast deployment and reliable UAV detection, tracking, and countermeasure capabilities.



DIRECTION FINDING
With accuracy within 2°



PASSIVE DETECTION
Enables operators to remain undetected



DETECT DRONES & CONTROLLERS
For comprehensive awareness of the threat



EXTENSIVE DRONE LIBRARY
Enables accurate classification and low false positives



SOFTWARE FIELD UPGRADES
Enables product evolution without costly hardware upgrades

Specifications

XJ-HDNT-1	
Detection Time	< 5s
Detection Range	Up to 8 km / 4.9 miles
Detection Frequency Bands	30MHz~6GHz
Detection Coverage Angle	Horizontal 360° / Vertical $\geq \pm 90^\circ$
Additional Frequency Bands with External Antenna	433M, 800M, 900M, 1.2G, 1.4G, 2.4G, 5.8G
Detection Coverage Angle with External Antenna	Omnidirectional 360°
Operating Temperature	-20°C to 50°C / -4 °F to 122 °F
Direction Finding Accuracy	3° RMS accuracy (On 433M, 800M, 900M, 1.2G, 1.4G, 2.4G, 5.8G)
UAS Geolocation	Ranging error ≤ 20 m when detecting a target UAV at 8 km under clear line-of-sight and low-interference conditions.
IP Rating	IP66
Color	White
Frequency Accuracy	1kHz
Detection Success Rate	99%

* Depending on the RF environment & line of sight

* Please email us for more information