



SKYLABS

FALCON Shield Fixed Drone Detection and Jamming System

Developed to meet modern security needs, it is a cutting-edge fixed drone defense solution featuring full-frequency detection and high-power jamming capabilities. With full-band scanning covering all drone models between 70MHz and 6GHz, FPV video transmission signal capture, and multi-mode jamming capabilities, it ensures the highest level of airspace security.

Thanks to its 1+N equipment network connection, the system integrates with multiple jamming units to create an effective and uninterrupted security shield across wide areas. Its superior protection against FPV drones makes it one of the most powerful aids for security forces in critical facilities, border areas, and strategic locations.

The FALCON Shield system can be optionally equipped with an integrated 10 km long-range radar module, significantly extending detection range beyond the standard RF-based ≤ 15 km limit and providing enhanced early-warning capability against all types of drones, including RF-silent or autonomous models.



Technical Specifications

- Detection Frequency Range: 70MHz – 6GHz (full-band scanning, detection, and display)
- Detection Distance: ≤ 15 km (depending on operating conditions)
- FPV Video Transmission Detection: Full-band scanning and image capture from 500MHz to 6GHz
- Video Transmission Detection Distance: ≤ 3 km (snapshot monitoring supported)
- Directional Scan: Horizontal 360°, Vertical $-90^\circ \sim +90^\circ$

Jamming Frequency Range:

300MHz-390MHz, 420MHz-480MHz, 650MHz-730MHz, 740MHz-840MHz, 860MHz-930MHz, 1080MHz-1200MHz, 1200MHz-1340MHz, 1340MHz-1500MHz, 1560MHz-1620MHz, 2385MHz-2490MHz, 4880MHz-5080MHz, 5100MHz-5300MHz, 5720MHz-5860MHz, 5870MHz-6060MHz (customizable)

- Jamming Distance: ≤ 5 km (depending on operating conditions)
- Jamming Angle: $0^\circ - 360^\circ$
- Operating Temperature: $-40^\circ\text{C} \sim +60^\circ\text{C}$
- Power Consumption: $\leq 3000\text{W}$
- Weight: ≤ 150 kg
- Dimensions: 1000mm x 2400mm (diameter x height)



Innovative Features

- Full-Band Protection: Unparalleled defense covering all drone models from 70MHz to 6GHz.
- FPV Superior Defense: Effective against all FPV drones with 8-16 frequency band expansion support.
- Instant Video Capture: Real-time monitoring and recording of images transmitted by FPV drones.
- Multi-Jamming Mode: Both targeted frequency jamming and full-spectrum suppression.
- Network Integration: Wide-area security with the simultaneous operation of multiple systems.

Areas of Use

Energy and Infrastructure Facilities:

Uninterrupted protection of critical infrastructure such as dams, power plants, and airports.



Public and Security Institutions: Airspace security at government buildings, stadiums, rally areas, and mass events.



Industrial and Special Areas: Factory sites, logistics centers, and areas requiring special security.



Military Facilities and Border Security: Effective defense against reconnaissance, surveillance, and attack attempts by unmanned aerial vehicles.



FALCON Shield Fixed Drone Detection and Jamming System offers a preventive and deterrent line of defense in modern security strategies with its advanced technology, wide coverage and powerful jamming features.

