

BREAKER

AIRSPACE AWARENESS FOR CRITICAL SITES

BREAKER is a fixed-site passive RF sensor designed to provide persistent low-altitude airspace awareness for critical infrastructure, military installations, airports, and urban environments. Combining passive RF detection and direction finding in a single system, BREAKER detects and verifies aerial threats—from uncrewed systems to manned aircraft—while remaining fully passive and undetectable.

Purpose-built for long-term deployment, BREAKER safely co-locates with telecom and aviation infrastructure. Its fully passive design is U.S. Title 18 compliant—requiring no spectrum licensing or RF emissions—supporting continuous airspace awareness for the protection of high-value sites.

[CAPABILITIES]

Passive Sensing

Tracks low-altitude aerial threats while remaining undetectable, enabling decision advantage.

Multi-Modal

Performs RF detection, direction finding, or passive radar within a single sensor, meeting the demands of any mission.

Signal Resilience

Operates in dense, signal-heavy environments, providing clear insight into airspace activity despite noise.

High-Confidence Detection & Tracking

Fully supports FAA remote ID reception, including positional verification using direction finding to minimize false alarms.

Integration Ready

An open architecture streams real-time tracks into command-and-control systems, accelerating coordinated response with mission partners.

Software-Defined

Evolves through remote software updates instead of hardware changes or site visits, staying future-ready against emerging threats.

[BREAKER]



Technical Specifications

PERFORMANCE	SIZE · WEIGHT · POWER	INTEGRATION & DATA
PASSIVE RADAR & DF 0.8–6.0 GHz	SIZE 23 W × 60 H × 19 D in	PRIMARY I/O 100 Mbps / 1 Gbps RJ45 Ethernet
FIELD OF VIEW 90° Az × 90° El	WEIGHT 101 lb	RAW DATA OUTPUT 100 Gbps SMLC fiber
TRACK ACCURACY <2° Az · <1° El	POWER <250 W	OUTPUT FORMAT GeoJSON-based API
TRACK UPDATE RATE 2 Hz	POWER INPUT Standard 100-240 VAC · <3 A	C2 CONTROL JSON RESTful API
DETECTION RANGE Passive Radar: 5–30+ km RF: 7–25 km		NETWORK Correlated data is delivered to Hidden Level Display or third-party command-and-control systems. 

[DEPLOYMENT OPTIONS]

Fixed-Site Mount safely to:	Tripods	Poles	Rooftops/Towers	Fixed Infrastructure
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[DESIGNED TO MEET INDUSTRY STANDARDS]

TRL-9 TECHNOLOGY READINESS LEVEL	IP66 INGRESS PROTECTION
MIL-STD-810H SHOCK · VIBRATION · TEMPERATURE	MIL-STD-416G EMI / EMC