

R1400 RADAR

The R1400 leverages next-generation radar technology for unmatched small UAS detection capability in a small, lightweight, portable package.

The R1400 is a 3-D Active Electronically Scanned Array (AESA) air surveillance radar designed specifically for the detection of small, low-flying targets. It was created by the world class radar team at Gryphon Sensors, LLC, leveraging nearly 60 years of radar expertise from its parent company SRC, Inc.

The R1400 provides rapid, precise detection and tracking of airborne targets including small unmanned aircraft systems (UAS), general aviation, birds, and other cooperative or non-cooperative targets of interest. As an AESA, it provides accurate target position and velocity in a configurable hemispherical volume of coverage: 360 degrees in azimuth and 90 degrees in elevation.

The radar is designed for maximum flexibility in operation including all-weather, permanent or mobile emplacement. It also features customized data output options for the required application. The radar can be set up in minutes and comes with built-in, user friendly interface software for quick configuration.

THE R1400 RADAR IS IDEAL FOR:

- Drone security
- Beyond visual line of site (BVLOS) UAS integration
- Protecting your IP



APPLICATIONS

AIR SURVEILLANCE FOR BVLOS UAS INTEGRATION APPLICATIONS

- UAS Traffic Management (UTM)
- Precision agriculture
- Product deliveries
- Rail, pipeline, or powerline inspections
- Gap filler for airspace deconfliction

AIR SURVEILLANCE FOR SECURITY APPLICATIONS

- Critical asset protection
- Intellectual property protection
- Airport security
- Sports venue surveillance
- Special event security
- Border surveillance

R1400 RADAR FEATURES

- Low size, weight and power (SWaP); man transportable
- Setup and operate within minutes
- 24/7 operation in all weather conditions
- User-friendly interface for configuration, command and control
- Situational awareness for both cooperative and for non-cooperative targets for safety and/or security
- Built in target tracking and classification; tracks hundreds of targets simultaneously
- Low false alarm rate
- Automatic data recording with playback
- Networkable: integrates and cues other sensors (like cameras) with high accuracy

GENERAL SPECIFICATIONS

Weight

80 lb (36.3 kg) for radar only,
200 lb (90.7 kg) with tripod and positioner

Input power

Standard wall outlet capable (US & EU)

Transmit Type

Pulse-Doppler
Tunable frequency: 9.3-9.8 GHz (x band),
5 MHz bandwidth

Interface

Ethernet

Detection Range

Small manned aircraft \leq 27 km
Small UAS \leq 10 km

Azimuth Coverage

Definable sector or full 360°

Elevation Coverage

Definable up to hemispherical (90°)

Environment

Designed to MIL-STD-810G

Electromagnetic

Designed to MIL-STD-461F
and FCC*/CE/UL standards

*This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.