Available in late 2019, the Gryphon R1410 is a 3-D, fully active electronically scanned array (AESA) surveillance radar designed to detect and track targets of interest including: drones, manned aircraft, personnel, land vehicles and marine vessels. It is ideal for the surveillance of borders, airports, critical infrastructure, ports, harbors and remote areas.

A true 3-D radar, the Gryphon R1410 provides accurate target location (including altitude) and velocity of airborne, ground-based, and coastal threats, in a configurable hemispherical volume of coverage: 360 degrees in azimuth and 90 degrees in elevation.

The radar can operate in all-weather conditions and can be emplaced permanently or in mobile configurations. It also features customizable data output options to accommodate customer interfaces. The system can be set up in minutes and comes with built-in, user friendly interface software for rapid configuration.
APPLICATIONS
• Air surveillance
• Counter drone
• Unmanned traffic management (UTM)
• Ground-based detect and avoid
• Multi-mission (available in 2020):
  • Border surveillance
  • Coastal/maritime surveillance
  • Critical infrastructure protection
  • Ground surveillance

BENEFITS
• Software configurable (air, ground, sea, or multi-mission)
• Situational awareness for both cooperative and non-cooperative air targets for safety and/or security
• Intuitive and user-friendly operation make it easy to deploy

SPECIFICATIONS
• Weight: 80 lbs (36.5 kg) for radar only, 200 lbs (90.7 kg) with positioner and tripod
• Input power: 1600W
• Transmit type: Pulse-Doppler
• Operating frequency: X band
• Interface: Ethernet (ASTERIX)
• Detection range
  - 8 km for small UAS (0.03 m²)
  - 16 km for a single person (0.5 m²)
  - 19 km small manned aircraft (1 m²)
  - 34 km for small vehicles and boats (10 m²)
  - 44 km for large vehicles and boats (30 m²)
• Minimum detection velocity: 0.5 m/s
• Accuracy
  - Range: 5 m
  - Azimuth: 0.2°
  - Elevation: 1.0°
• Operating temperature: -40° C to +60° C
• Azimuth coverage: Definable sector or full 360°
• Elevation coverage: Definable up to full hemispherical (90°)
• Environment: Qualified to MIL-STD-810
• Reliability (mean time between critical failures): 20,000 hours

FEATURES
▷ True 3-D radar
▷ Full multi-mission: simultaneously tracks targets over air, land and sea
▷ Track-while-scan (TWS)
▷ Can be Integrated into larger systems to cue cameras, weapons or other sensor systems, with high accuracy
▷ Built-in-test for automatic fault isolation
▷ Low size, weight and power (SWaP); man transportable
▷ Low life cycle cost
▷ Tower, vehicle mount and tripod configurations
▷ Low false alarm rate
▷ Automatic target tracking and classification; tracks hundreds of targets simultaneously
▷ Advanced 3-D display