

PANTHER

ADAPTIVE PHASED ARRAY
ANTENNA TECHNOLOGY



AV's phased array antenna technology provides next generation RF capabilities to a wide range of telemetry and communication applications. PANTHER transforms RF capabilities by delivering superior efficacy with a reduced modular footprint and all-digital framework for autonomous operations and remote access. PANTHER provides true active electronic scanning with a wide-ranging field of regard and ability to capture multiple simultaneous, position independent signals.

_Specifications

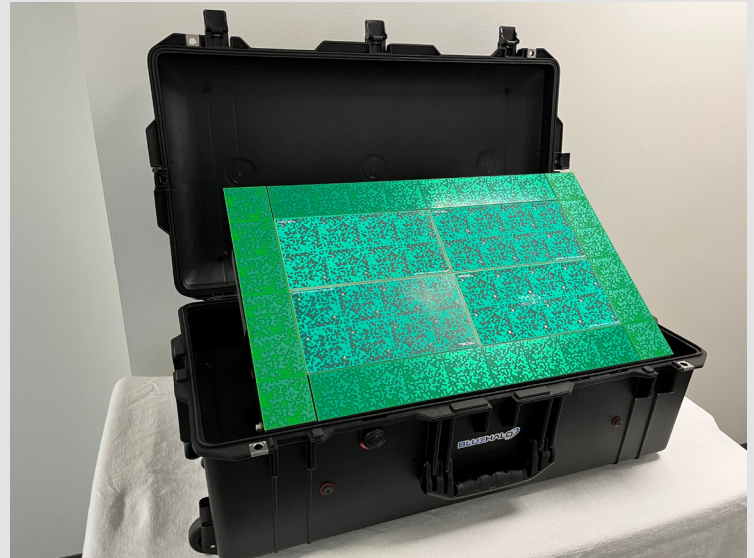
- › Various system configurations are designed to support airborne, ground, and sea applications
- › Supports L, S, and C bands
- › Data rates from 0.5 Mbps to 30 Mbps
- › Compact size minimizes array size and weight
- › Waveform agnostic
- › Tracks and receives multiple simultaneous targets

_Features

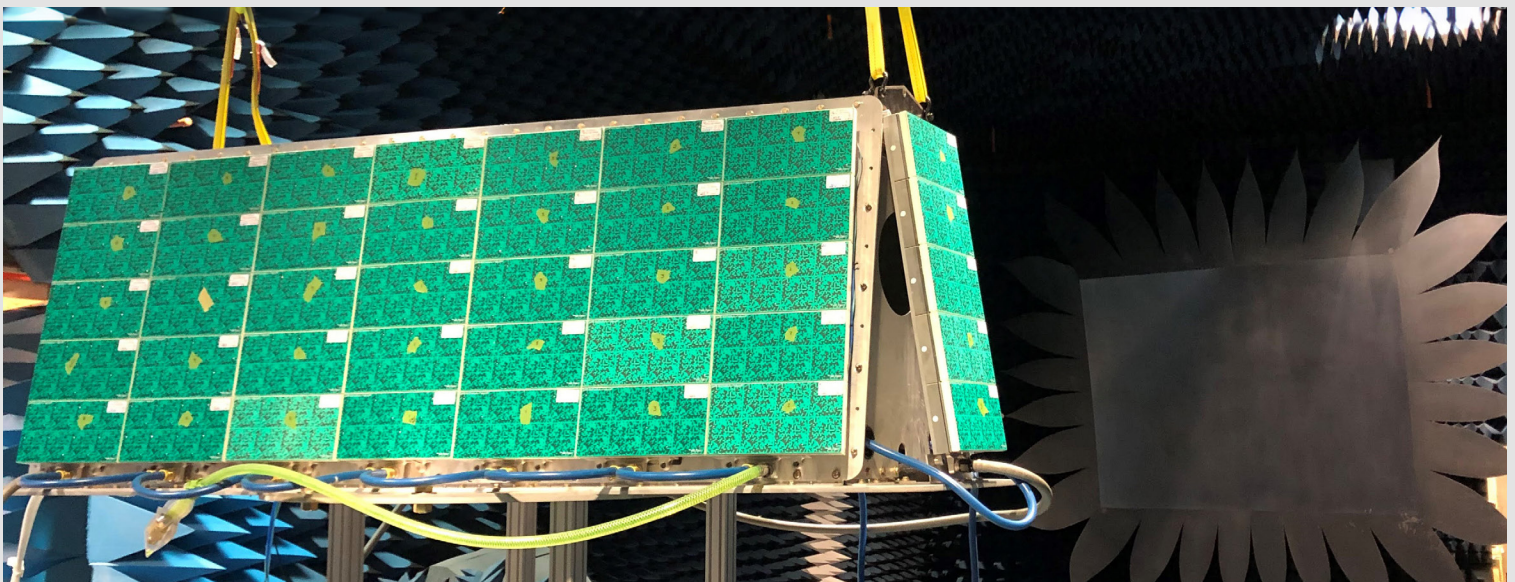
- › Modular antenna panels coupled with distributed processing makes the technology scalable to meet a wide range of mission gain and sensitivity requirements
- › System is real-time configurable to concurrently acquire different signals with unique frequencies and data rates.
- › Waveform agnostic, capable of tracking multiple telemetry streams simultaneously (tested with ARTM CPM, PCM/FM, SOQPSK-TG, and others).
- › Size weight and power (SWAP) efficient modules
- › Portable and transportable makes it suitable for temporary or permanent airborne and ground operations.
- › Scan volume of each panel is +/- 90 degrees from boresight.
- › Capable of capturing and tracking signals well below the noise floor.
- › No a-Priori Information needed about waveforms or direction.
- › Advanced antenna technology based on GTRI's fragmented aperture design

_Applications

- › Electronic Warfare
- › Over the Horizon Communications
- › Telemetry
- › 5G



MOBILE - 4 PANEL DEMO UNIT



PANTHER AIRBORNE SYSTEM IN ANECHOIC CHAMBER