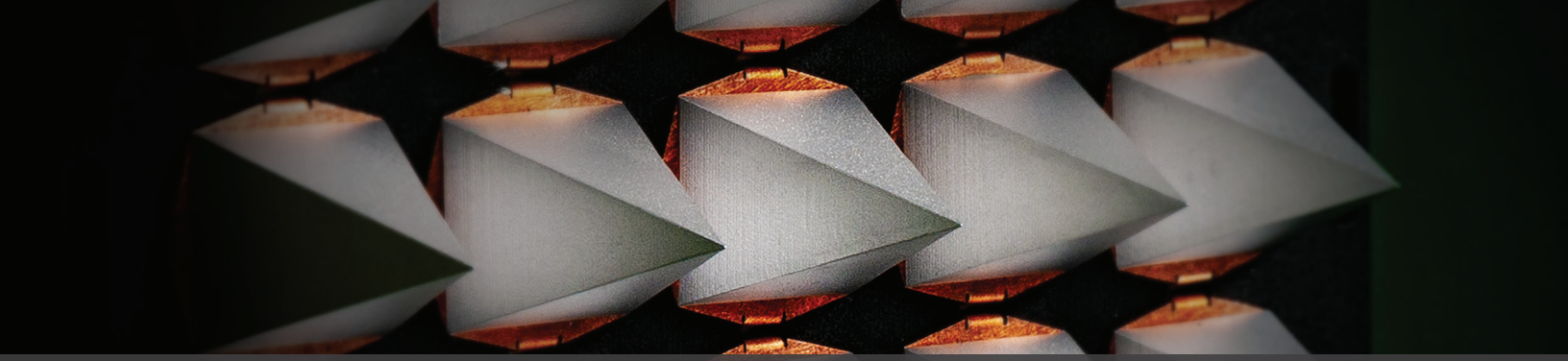


RavenStar™ AN ULTRA-WIDEBAND TECHNOLOGY ADAPTABLE TO YOUR MISSION

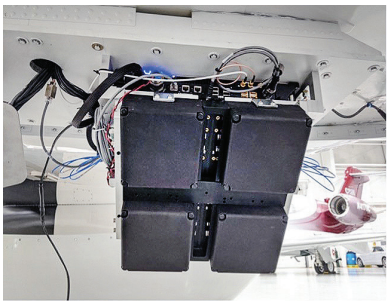
RavenStar™ is an innovative ultra-wideband technology that enables scalable RF performance and includes advanced features such as jam resistance, multiple polarizations, duplex operation and beam steering. This pioneering technology can replace antenna farms that consume precious SWAP and provide advanced, multichannel features typically only provided by expensive and complex multi-element arrays. The aperture:

- Is suitable for integration onto platforms and infrastructure in all domains—land, air, maritime and space
- Can support missions that require multiple communications methods (EW, SIGINT, IMINT, C4I, TTL)
- Provides advanced, multichannel features appropriate for integration with emerging, highly capable software-defined radios (SDR), which are currently impeded by narrow-band antenna capabilities
- Enables new capabilities by eliminating conventional antenna feature trade-offs, allowing significant design flexibility and delivering spectrum dominance to our warfighters

Key Features

- Ultra-wideband
- Steerable
- Polarization Independent
- Duplex operation
- Modular
- Scalable
- Jam resistant

BATTELLE

RavenStar™ is an architecture adaptable to your mission. Our most mature demonstration unit has the following characteristics:

- 700MHz – 8GHz bandwidth
- 32 ports, 16 per polarization
- 2.2 lbs. with enclosure
- 6 x 6 x 2.5 inches
- 20dB+ polarization isolation

We have tailored other units to provide:

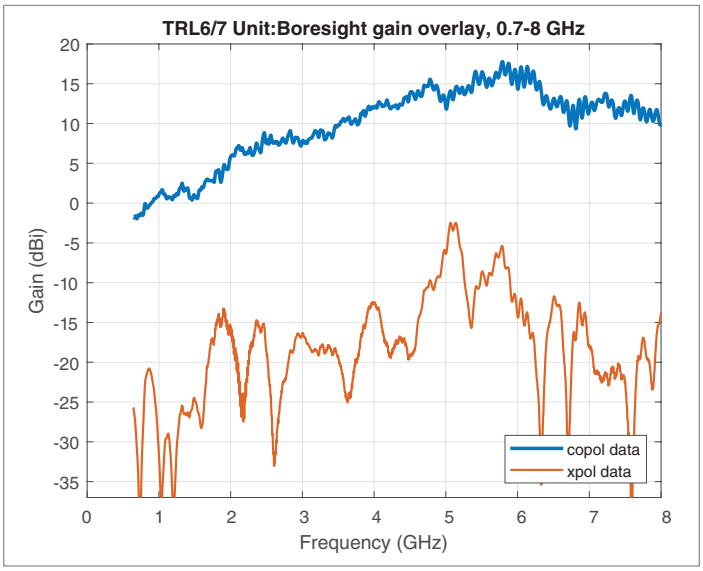
- 40dB+ Transmit to Receive isolation
- 100MHz-18GHz bandwidth
- Decreased weight
- Pressure balanced oil filled for submersibles
- Multi-RavenStar™ configurations to achieve a specific gain/ beam pattern
- High altitude operation over 121,000ft

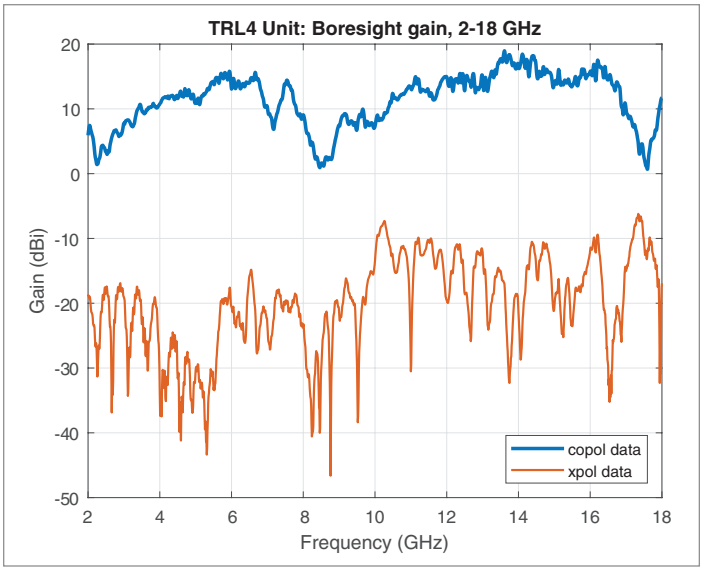
No other architecture simultaneously provides:

- Ultra-Wide bandwidth over many octaves
- Steerability and direction finding across its entire bandwidth
- Multiple Signal of Interest Support
- High efficiency
- Jam Resistance & High Dynamic Range
- Affordability – made out of common materials

Other key areas of development & prototyping:

- 5G
- SATCOM
- C5ISR





Contact us today to learn more about the antenna revolution

800.201.2011 | solutions@battelle.org | www.battelle.org

US and Foreign Patents Pending

BATTELLE
It can be done

ID 853 02/23