

## Advanced RF Systems







## Multi-band Software Defined Antenna (MSDA) Technology

BlueHalo's Multi-band Software Defined Antenna (MSDA) is a phased array technology that simplifies mission operations through agile and re-configurable beamforming tiles. MSDA features an LSC-band in-tile beamformer with the ability to communicate with 12+ targets, half-duplex receive/transmit (Rx/Tx) channels, and ±60 degree scan volumes in Azimuth and Elevation. The MSDA architecture is extensible across multiple mission areas; enabling communications between multiple spatial, spectral, and temporal diverse targets.

## Wide Area Scanning Parabolic (WASP)

BlueHalo's Wide Area Scanning Parabolic (WASP) utilizes digital beamforming techniques to provide multiple tracking beams across multiple bands on a single parabolic reflector. This solution is an LSC-band coverage, high efficiency, cost effective solution for multi-target tracking, telemetry, and control missions.

## Broad Area Deployable Ground Terminal Enabling Resilient Communication (BADGER)

The Broad Area Deployable Ground Terminal Enabling Resilient Communication (BADGER) system provides a modular and deployable large form factor phased array solution to support complex SATCOM, telemetry, and electronic warfare missions. It is an LSC-band, 164 MSDA tile phased array with a 2 kW equivalent spatial distributed high power amplifier (HPA) that is installed on a deployable 20-foot ISO container. BADGER leverages the same core MSDA technology that is used within the WASP feed.







