

## SATCOM Multi-Function AESA

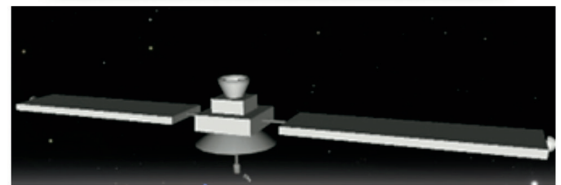
The SATCOM man-portable multi-functional AESA is a system where a rugged foldable AESA meets Ku-band link, budget, weight, and portability. It supports half-duplex operation and +10 Mbps data rates. The IEEE 1588 Time Sensitive Network (TSN) protocol eliminates the need for interconnects besides the Ethernet cable. The unit operates using Power-over-Ethernet (PoE), and has built-in GNSS for timing and location. TSN allows tiles of multiple units to expand CONOPS to diversity, higher data rates, and MIMO. Built-in aim indicators allow for easy alignment. 1000T Ethernet supports high data rates. This AESA has a scan capability of 65° in azimuth and elevation.

A single foldable SATCOM AESA weights under 5 lbs and will run for hours on a 5-lb 12V battery.

## Features

- TSN allows units to be tiles to expand CONOPS
- RHCP downlink: 10.7 to 12.75 GHz
- LHCP uplink: 14.0 to 14.5 GHz
- 31.5 dBic system gain at boresight exceeds G/T by 1.5 dB with -25 dB Chebyshev taper and scan loss

Specifications	
Frequency Range	Downlink: 10.7 to 12.75 GHz Uplink: 14 to 14.5 GHz
Antenna Boresight	31.5 dBic
Scan Angles	+/-65° sub-degree precision
Alignment	Aim indicators
Weight	< 5 lbs
Dimensions (folded)	5" x 8" x 2"
Dimensions (deployed)	10" x 8" x 1"
Power	12V DC



Ethernet Connection for Expanding Aperture to Router for Higher Data Rate



Dual Array Ethernet Connections to Router