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SATCOM Multi-Function AESA

The SATCOM Man-Portable multi-functional AESA is a system where rugged foldable AESA meets Ku 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. Scan capability of 65° in azimuth and elevation.
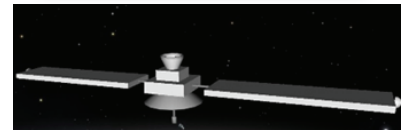
A single foldable SATCOM AESA weights under 5 pounds and will run for hours of a 5-pound 12 V battery.

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FEATURES

- TSN Allows units to be tiles to expand CONOPS
- RHCP Downlink 10.7 – 12.75GHZ
- LHCP Uplink 14.0 -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

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Specifications

Frequency Range	10.7 to 12.75 GHz DL, 14 to 14.5GHz UL
Antenna Boresight Gain	31.5 dBic
Scan Angles	+/-65° sub-F7degree precision
Alignment	Aim indicators
Weight	< 5 lbs
Dimensions (folded)	5" x 8" x 2"
Dimensions (deployed)	10" x 8" x 1"
Power	12V DC