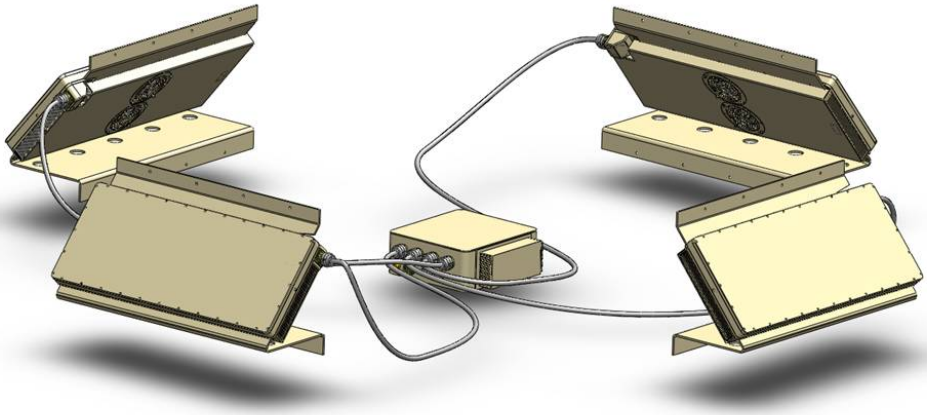
Broadband Distributed Aperture SATCOM-On-The-Move (SOTM) Terminal



Prime Contractor: Alico Systems Inc; Torrance, CA Tel: (562) 436-1510; Email: products@alicosystems.com

Broadband Distributed Aperture SATCOM-On-The-Move (SOTM) Terminal

Antenna Specifications

- SATCOM On the Move Operation
- Voice, data and streaming video capable
- Full Duplex Data Rate Performance
  - Receive 256 to 1024 Kbps
  - Transmit 512 to 1536 Kbps
- All electronic phased array beam steering
  - Autonomous operation
  - Built-in beam pointing and satellite tracking capability at 100 Hz
- Full Hemispheric Coverage
  - Elevation 0^0 (horizon) to 90^0 (zenith)
  - Azimuth 0^0 to 360^0 Continuous
- Power
  - 700 W
  - 115 VAC or 28 VDC
- Weight
  - 150 lbs

Interface Specifications

- Frequency
  - X-band Receive 7250 to 7700 MHz
  - X-band Transmit 7975 to 8400 MHz
- Satellite Constellation Options
  - WGS (US DoD)
  - XTAR (US Loral)
  - SpainSat (Spain)
  - Skynet (UK Paradigm)
- Compatible IP Modems
  - L3 MPM-1000/2000
  - iDirect e850mp
  - ViaSat Linkway
  - Hughes
  - Others, to be specified
- Modem interface
  - L-band 950-1450 MHz
  - Modem agnostic

Benefits

- Zero profile on top of vehicle
  - Stealthier antenna design
- No blockage due to gun turret and cargo on top of vehicle
- No blockage due to vehicle heading
- No moving parts
- No gimbal lock or key hole issues
- Supports fast mover operation
- Higher reliability
- No field service required
- Continuous operation
  - 100% duty cycle
  - Soft handoffs between antenna panels

- US Army SBIR Project
  - At-the-Quick-Halt Satellite Tests FY 2012 (completed)
  - TRL 6 Satellite-On-the-Move tests planned FY 2013

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