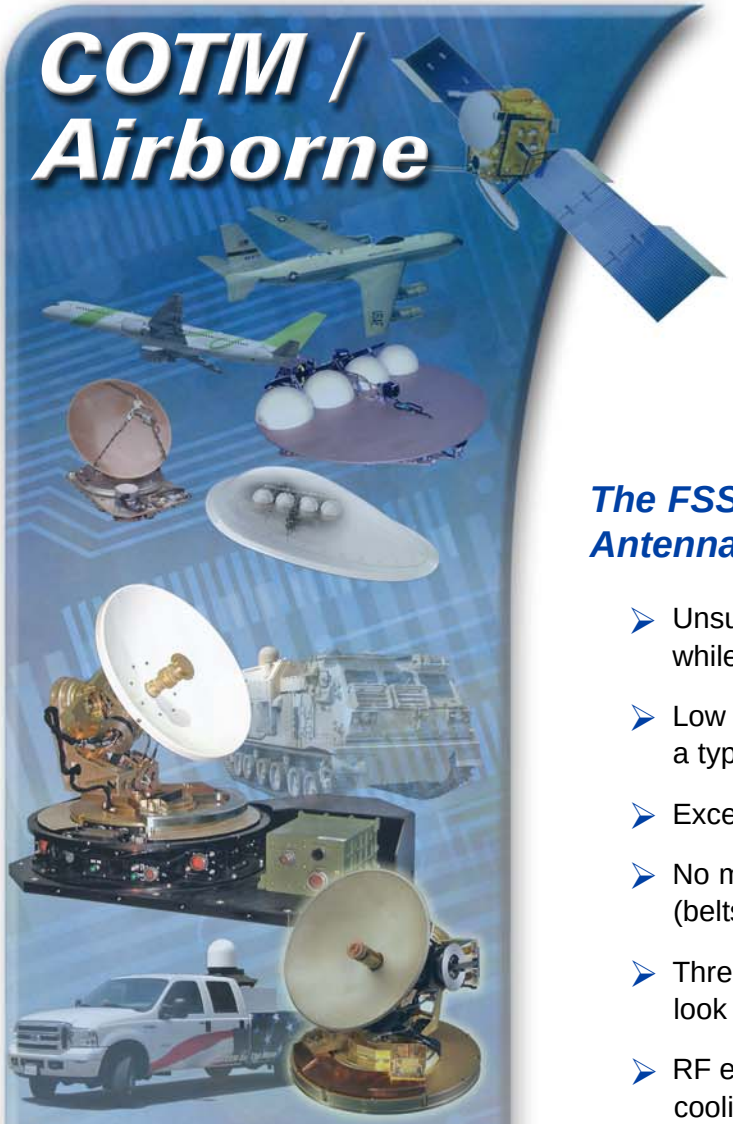
COTM / Airborne



Available Options:

- Install kits
- Ku-/Ka-Band (in process)
- Extended frequency bands
- Dual polarization (Rx only)
- Inertial reference units
- 1/2 ATR or 2U ACUs
- Ballistic radomes
- Co-polarization

L3 communications

Datron Advanced Technologies

Designed to Last!

FSS-4180-LP
Low Profile
Communications On The Move (COTM) Ku-Band Antenna System

The FSS-4180-LP Ku-Band COTM Antenna Features:

- Unsurpassed dynamic performance; 100% link availability while vehicle traverses the most challenging terrain.
- Low profile enables C130 roll-on, roll-off when mounted on a typical HMMWV with S-250 shelter.
- Excellent RF performance with extremely low sidelobes.
- No maintenance items to wear out or adjust, (belts, gears, etc.).
- Three-axis design – 100% availability up to 70° elevation look angles.
- RF electronics in sealed enclosure and conduction cooling (no moisture or sand penetration).
- Sealed radome with condensation vents and desiccant prevents moisture accumulation within radome.
- With an EIRP uncertainty of less than 1dB, the L-3 Datron antenna allows the network operator to maximize use of available bandwidth.

FSS-4180-LP Performance Characteristics

Item	Characteristic
RF Frequency	Rx: 10.95 to 12.75 GHz Tx: 14.0 to 14.5 GHz
IF Frequency	Rx: 950 to 2050 MHz Tx: 950 to 1450 MHz
G/T	Greater than 12 dB/k at 11.7 GHz from 10 to 90 degrees elevation, 23 deg C, radome included
EIRP	Greater than 45.0 dBW with 25W SSPA
Beamwidth	Rx: 4.0 degrees nominal Tx: 3.2 degrees nominal
Polarization	Rx: Steered Linear H/V Tx: Orthogonal Steered Linear H/V (polarization automatically steered) >25 dB cross polarization isolation under all dynamic conditions
Velocity	Az: 700 deg/s El: 500 deg/s Cross Pol: 800 deg/s

Item	Characteristic
Acceleration	Az: 1500 deg/s^2 El: 1500 deg/s^2 Cross Pol: 2000 deg/s^2
Coverage	Az: Continuous El: -5 to +105 deg
Pointing Error	Less than <1 dB (about 0.9 degrees)
Power	28VDC, peak @650watts, continuous @420 watts
Antenna Size	21" dia. x 16" tall
Antenna Weight	92 lbs for antenna radome and RF electronics
Controller Weight	1/2 ATR <10 lbs. 2U <14 lbs.
MTBF	Estimated at 7000 hrs
Inertial Navigation System	Honeywell Talin or Smiths Aerospace NFM
Monitor and Control Interface	Ethernet

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