TACTICAL REMOVABLE AIRBORNE SATELLITE COMMUNICATIONS FOR C-130 MILITARY TRANSPORT AIRCRAFT

DESCRIPTION:

Designed as a complete, customizable upgrade, TRASC has been developed to provide a multi-functional capability to work with various Ka, Ku, and/or X-band solutions for transmitting voice and data for Roll-On / Roll-Off (RORO) C-130 airborne applications. Developed in partnership by industry experts SelectTech and R4 Integration, this turn-key solution is fully FAA-compliant and has been created to work on all C-130 variants.

ANTENNA MOUNT FEATURES & BENEFITS:

- Reduced SWaP: Reduces weight from current solution's 88lbs to 65lbs
- Mounting Options: Hatch (Multi-Purpose Hatch System) and/or
  Wing shoulder (Multi-Purpose Shoulder Panel System)
- Rapid RORO installation with NO modification to the aircraft
- Radomes provide safer solution without obstructions to aircraft surfaces/antennas
- On-site maintenance and repair by certified technicians
- Dual-band SATCOM operation with Skytech X/Ka-band or Ku/Ka-band antenna
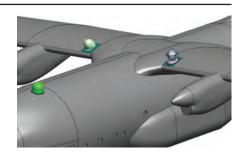
INTEGRATED KIT FEATURES:

- SATCOM: Multiple airborne modems and routers based on customer needs
- Network: Router can be integrated to match customer ground configuration
- Power: Single power input provides power to all components and antenna. Power available for user equipment such as phones and laptops
- Options: Cryptographic devices; additional routing and switching; KVM; custom cable sets
- Full-installation kit to include aircraft-certified cabling and panels
- Integration personnel available for aircraft kit installation
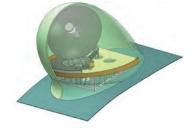
BASE TRASC KIT INCLUDES:

- Antenna and choice of hatch or shoulder panel mounting options
- Transit case with components:
  - 4U composite transit case with removable rack
  - iDirect Government 9800 AR Airborne Router
  - Cisco 4331 ISR Network Router with private network switch ports for 8 users
  - Dual-Input Airworthy Power Supply:
    - 115VAC/47-800Hz and 28VDC Inputs
    - 115-240VAC/50-60Hz (equipment) and 28VDC (antenna) outputs
- Antenna and kit cables

SHOULDER MOUNT

HATCH MOUNT

ROLL-ON ROLL-OFF (RORO) ELECTRONICS SUITE (base kit)

Preferred antenna is UltiSat-provided SkyTech dual-band antenna integrated with the complete TRASC system.

UltiSat

IDS
NORTH AMERICA
an IDS Ingegneria Dei Sistemi company

FEATURES & BENEFITS:

- Evolutionary Antenna System with Dual Spectrum Access
- High density performance within minimal swept volume
- Tri-axis stabilization
- No downtime to switch bands
- Selectable MIL + COM Ka-band
- Integrates GPS and IMU
- Intuitive User GUI for Moniroring & Control
- Compatible with multiple modem types
- DO-160G compliant

BB45XKa Dual Band Antenna
Airborne IP Access Point

PERFORMANCE SPECIFICATIONS:

Frequency	X-band	Ka-band
Transmit:	7.90-8.40GHz	29.00-31.00GHz
Receive:	7.25-7.75GHz	19.20-21.20GHz
RF Performance	X-band	Ka-band
P1dB EIRP:	45.4dBW	54.5dBW
Tx Gain:	30.2dBi	41.2dBi
G/T:	8.2 dB/K	13.9 dB/K
Polarization	Circular	Circular

PHYSICAL & POWER:

Reflector	45cm parabolic
Size	Width/Dia: 48.0cm (18.9in)
	Height: 55.9cm (22.0in)
Weight	23kg (50.6lbs) incl. ACU, GPS, IMU
Power	28 VDC (Peak 460 W)
Operational Temp	-55° C/+60° C
Tracking	Azimuth: 360° unlim. (70deg/sec)
	Elevation: 0° - 100° (65deg/sec)
	Roll: +/-20° (50deg/sec)
	Pointing Accuracy: <0.2deg
Interface	10/100 BaseT Ethernet

BB45KuKa Dual Band Antenna
Airborne IP Access Point

PERFORMANCE SPECIFICATIONS:

Frequency	Ku-band	Ka-band
Transmit:	14.00-14.50GHz	29.00-31.00GHz
Receive:	10.70-12.75GHz	19.20-21.20GHz
RF Performance	Ku-band	Ka-band
P1dB EIRP:	46.7dBW	54.5dBW
Tx Gain:	34.9dBi	41.2dBi
G/T:	12.0 dB/K	13.9 dB/K
Polarization	Linear	Circular

PHYSICAL & POWER:

Reflector	45cm parabolic
Size	Width/Dia: 48.0cm (18.9in)
	Height: 55.9cm (22.0in)
Weight	23kg (50.6lbs) incl. ACU, GPS, IMU
Power	28 VDC (Peak 460 W)
Operational Temp	-55° C/+60° C
Tracking	Azimuth: 360° unlim. (70deg/sec)
	Elevation: 0° - 100° (65deg/sec)
	Roll: +/-20° (50deg/sec)
	Pointing Accuracy: <0.2deg
Interface	10/100 BaseT Ethernet