## AN/TSC-161

**QUAD-BAND DUAL HUB SATELLITE TERMINAL (QDHT)** 

# TACTICAL HMMWV MOUNTED HUB/GMF SATCOM TERMINAL



Satellite Network's QDHT provides a cost-effective COTS/NDI solution for mobile GMF-compatible SATCOM terminals. The dual hub configuration support two separate 6 spoke GMF networks and provides a high data rate uplink (up to 20 Mbps). The QDHT is based on the successful AN/USC-60A Flyaway Tri-band Satellite Terminal (FTSAT) that has been deployed worldwide.

### FEATURE OVERVIEW

- C-, X-, Ku- and Ka-Band
- Electronics based on the AN/USC-60A FTSAT for simplified logistics and training
  - Simultaneous three antenna operation
    - 2.4 Meter on-board antenna
  - Two (2) external antennas (LHGXA, QRSA or 2.4 meter FTSAT antenna)
    - C-130 roll-on/roll-off
    - Detachable pallet with antenna
      - Ease of Deployment
      - Simple setup and take down



#### PERFORMANCE SPECIFICATIONS

Parameter	C-Band	X-Band	Ku-Band	Ka-Band	Units
Transmit Frequencies	5.850 to 6.425	7.90 to 8.40	14.00 to 14.50	30.0 to 31.0	GHz
Receive Frequencies	3.625 to 4.200	7.25 to 7.75	10.95 to 12.75	20.2 to 21.2	GHz
2.4 Meter "Pop-Up" Antenna Subsystem					
Transmit Gain (1)	40.6	42.8	47.7	53.7	dBi
Receive Gain (1)	36.3	42.8	46.0	50.5	dBi
G/T (2)	16	21.7	25	26	dB/°K
EIRP (Linear) (3)	61.5	67	66.5	67	dBW

- (1) Measured at low end of band, includes filters and feed losses
- (2) At 23°C and 10° elevation
- (3) Single Carrier

Temperature

- $-30^{\circ}$ C (-22° F) to + 50°C (122°F)
- $-40^{\circ}$ C( $-40^{\circ}$  F) to +  $70^{\circ}$ C ( $158^{\circ}$ F) Storage

#### FEATURES

- Interim DSCS Certifiable
- INTELSAT / EUTELSAT Certified
- C-130 Transportable (roll-on / roll-off)
- Fixed and Rotary Wing Transportable
- Commercial Aircraft Transportable (Pallet Assembly) 737 or larger
- M1097 Transportable Auto acquisition and tracking of satellites
- Controls three antennas simultaneously
- Integral 2.4m Quad Band Antenna
- HMMWV-Mounted Single GMF Hub and HMMWV Mounted GMF Spoke Also Available

- Interfaces to LHGXA and QRSA Antenna Systems
- Dual Hub supports up to twelve (12) spokes
- Tri-Band and Ka-Band Test Translators
- Set-Up / Tear Down Time: 30 minutes
- Future IMPCS Capability
- GMF Compatible
- STEP Interface
- Control and Monitoring Subsystem

We can assist in meeting specific SATCOM mission requirements



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