



Building Networks. Connecting People. Fortifying the Bottom Line.

Transportable Network Hub X/Ku/Ka-Band

As the demand for satellite capacity steadily increases, the satellite communications systems used by the U.S. military must rapidly evolve to operate in multiple frequencies over both Wideband Global SATCOM (WGS) and commercial satellites.

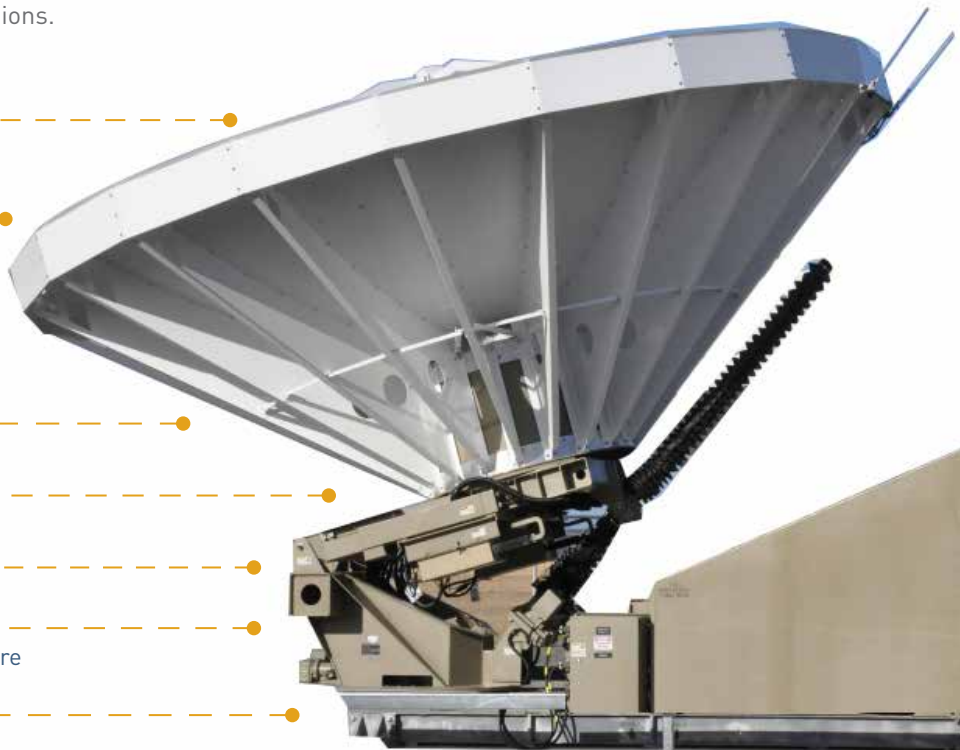
DataPath's Tri-band Transportable Network Hub is the right solution to deliver secure, reliable communications anywhere you need to establish high-speed network connectivity. Engineered for reliability and flexibility in rugged environments, the earth terminal is built for remote, field locations.

DataPath has over 150 Transportable Network Hubs installed in support of military operations in Europe and the Mideast. With the adaptation to Tri-band (X, Ku and Ka) we increase the operational flexibility and deliver the needed capacity, connectivity and control to support demanding missions.

Using X-band and Ka-band terminals over WGS satellites enables the U.S. military's critical communications, including digital-quality voice, data and imagery, while eliminating the cost of commercial satellite airtime. The Ku-band terminal brings additional options to the high demand for bandwidth that military operations require.

The Tri-band hub's configuration consists of a control shelter and one or two antennas, which might be looking at different satellites or operating at different frequency bands. The control shelter includes redundant environmental control units to protect the equipment from harsh field conditions and the flexible design allows the antennas, shelter and baseband equipment to be installed at different locations on a site as requirements vary from site to site. The complete system is designed for military air transport.

- TRI-BAND CAPABILITY** — — — — — ●
X, Ku, Ka - industry standard L-Band modern agnostic
- TWO ANTENNAS** — — — — — ●
Supported per control shelter
- RUGGED, RELIABLE AND TRANSPORTABLE** — — — — — ●
- EASILY DEPLOYABLE** — — — — — ●
- FIELD-PROVEN COTS DESIGN** — — — — — ●
- AUTOMATIC SATELLITE ACQUISITION** — — — — — ●
- MAXVIEW®** — — — — — ●
Supported by MaxView® network management software
- WGS X AND KA BAND CERTIFIED** — — — — — ●
Band kits field swappable in ~5 hours



SPECIFICATIONS

	GENERAL	X BAND	KU BAND	KA BAND
Configuration	Transportable shelter and antenna terminal			
Antenna	4.8m or 6.3m, auto-track, fully motorized			
Modem configuration	Up to 1:8 FDMA, 10 TDMA, and 1 TDMA MRT per antenna			
RF electronics configuration	Redundant (HPA/BUC/LNB)	up to 1:1	up to 1:2	up to 1:2
IF frequency	L Band	950 - 1450 MHz	950 - 1700 MHz	1000 - 2000 MHz
Applications	FDMA, TDMA voice, video, data			
Compliance/certifications	WGS X and Ka-band			
RF Parameters				
Downlink frequency		7.25 - 7.75 GHz	10.95 - 12.75 GHz	20.2 - 21.2 GHz Rx
Uplink frequency		7.90 - 8.40 GHz	13.75 - 14.50 GHz	30.0 - 31.0 GHz Tx
Number of ports		2	4	4
Polarization		Circular	Linear	Circular
Antenna Size (G/T and EIRP)				
4.8m EIRP		74.5 dBW	77.6 dBW	78.5 dBW
4.8m G/T		27.5 dB/K	31.0 dB/K	32.5 dB/K
6.3m EIRP		76.7 dBW	80.7 dBW	80.7 dBW
6.3m G/T		30.0 dB/K	32.5 dB/K	34.5 dB/K
Electrical Parameters				
System voltage/frequency	380 Y/220 V 3 ph, 50 Hz, 208 Y/120 V 3 ph, 60 Hz, 415 Y/240 V 3 ph, 50 Hz			
Power source inputs	2 with automatic transfer switch			
UPS run-time	15 minutes minimum			
Transportation				
Military/Commercial Transportation	Air certified for USAF C-130, C-17, C-5			
Environmental Parameters				
Humidity	10 to 100% non condensing			
Temperature operational/storage	-15 to +50°C/-20 to +60°C			
Wind operational/survivable	45 Mph, 60 Hph gusting/90Mph			
Accessories/options				
Antenna de-icing	Gas or electric			
Generator power	Various options available			

DataPath's family of custom satellite communications systems are supported by our end-to-end 24/7 support services and powerful MaxView® software for network automation and control. These rugged, field proven systems are designed for sustained and reliable operation and superior performance - anytime, anywhere.