

4.0 meter Quad-band SATCOM Terminal (QST)



The 4.0 meter Quad-band SATCOM Terminal (QST) is a light-weight, trailer-mounted terminal available to support world-wide, quick-deployment satellite communications.

Key Features

Quad-band capable

- Commercial, DSCS and WGS interoperability

Certification

- ARTSTRAT certified
- Meets DISA and INTELSTAT certification requirements

Tactical antenna design

- < 45 minute set-up time with 3 trained crew members; feed change-over in < 15 minutes

Compact, light-weight rugged design

- Tactical system HMMWV towable over highway or semi-improved roads, air transportable by C-130, C-17, CH-47, and CH-53 military aircraft

Large 4.0 meter high-performance aperture

- Reduced satellite usage cost compared to a 2.4 m aperture

Remote operation with fiber-optic inter-facility link

- Manpower and location flexibility

L-band architecture

- Ease of expandability and technology insertion

Interoperability

- Connectivity assurance with commercial and military SATCOM

4.0 meter Quad-band SATCOM Terminal (QST)



Product Description

L-3 Communications' 4.0 meter multi-band transportable antenna is designed for worldwide operation in military tactical environments. Host vehicle interface kits include a HMMWV tow package with an electronics interface to host vehicle IF/RF and prime power systems. The configuration of the terminal (depending on the unique program requirements) can be single-band or multi-band, single-carrier or multi-carrier, with manual or automatic redundancy. Our 4.0 meter terminal has been ARSTRAT certified and meets DISA and INTEL SAT certification requirements.

The antenna includes six common, interchangeable reflector panels and feed structures for C, X, Ku, Ka and simultaneous X and Ka-band. C-band uses linear polarization and circular polarization (CP); X-band uses CP; Ku-band uses linear; Ka-band uses CP; and the X/Ka-band uses CP. Feed changeover time is less than 15 minutes by two operators with no

tools. The antenna provides high gain, optimal receive G/T, and INTEL SAT/ DISA compliant side-lobe levels. The antenna supports manual and automatic satellite acquisition and tracking. Elevation travel is 0° to 90° Azimuth travel is $\pm 90^\circ$.

The antenna is trailer-mounted with stabilization jacks and outrigger kit to maintain antenna pointing under operational winds. Three crew members with no tools set up the antenna in less than 45 minutes. All antenna components, including feeds, reflector panels and redundant tri-band and Ka-band HPAs are stowed on the trailer in the transport configuration. Operational electronics reside on-board the trailer or can be incorporated in a host terminal. The trailer suspension system is designed for stable mobility over improved and semi-improved roads. Transportation by ship, rail, fixed-wing aircraft (C-130 and C-17) and rotary-wing aircraft (CH-47 and CH-53) are also supported.



Communication Systems – West

640 North 2200 West, P.O. Box 16850, Salt Lake City, Utah 84116-0850 | U.S. Toll Free: 800-874-8178 | International: +801-594-2000
Fax: 801-594-3003 | Email: CSW.Products@L-3com.com | www.L-3com.com/csw

This presentation consists of L-3 Communications, Communication Systems-West Division general capabilities information that **does not contain controlled technical data** as defined within the International Traffic in Arms Regulations (ITAR) Part 120.10 or Export Administration Regulations (EAR) Part 734.7-11. Data contained within this document are summary in nature and subject to change at any time at L-3 Communications' discretion.