

FlyAways

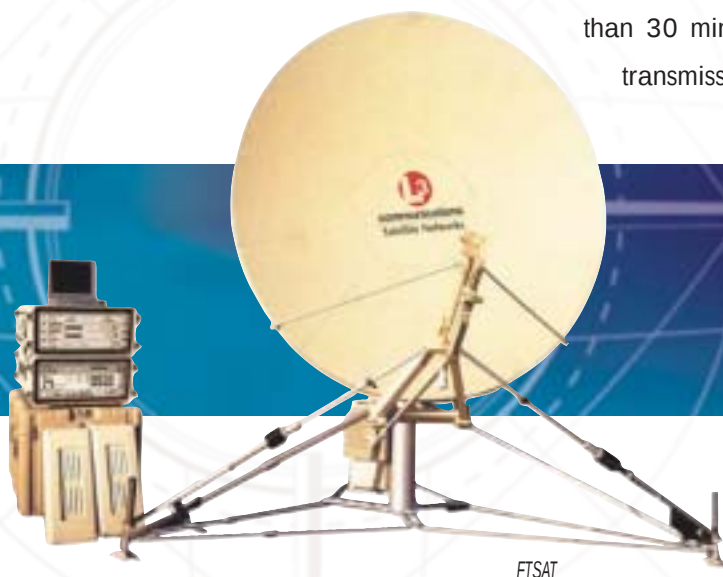
For the most reliable, efficient, and cost-effective satellite communications terminals, look no further than Satellite Networks' product lines. We offer three types of deployable flyaway satellite communications terminal systems, with options for 1.2, 1.8, and 2.4 meter antennas. Whether your need is for remote communications, emergency and disaster response, oil and gas exploration, or start-up application test and demonstration, look to our Quick Reaction Trekker, Super Light Safari system, or Tri – Band Satellite Terminal (FTSAT).

The Trekker line provides voice, fax, data, video teleconferencing, and Internet access, supports both C- and Ku-Bands, and can carry voice over IP. This product line can be configured with redundancy options among other features.

If you are developing a video only solution, then consider the Super Light Safari. Operating in either C- or Ku-Bands – with a quick changeover dual-band option available – and with various redundancy options, it is the smallest, lightest flyaway available on the market.

Responding to the need for a tri-band system, Satellite Networks' FTSAT is the preferred industry solution. Fully certified for Defense Satellite Communications Systems (DSCS) and qualified for INTELSAT operations. Its modular design makes it the ideal solution to enable incremental implementation of digital video, voice and/or fax transmissions. Our FTSAT system also incorporates sophisticated encryption techniques to enable secure communications. This field-proven flyaway offers operational flexibility and dependability.

Our three lines feature a compact, rugged design and quick set-up in less than 30 minutes, making them convenient for just about any remote transmission requirement.



communications
Satellite Networks

Trekker - Digital Voice/Fax/Data Flyaway Performance Specifications

Parameter

Transmit Frequencies
Receive Frequencies

C-BAND

5.850 to 6.425 GHz
3.625 to 4.20 GHz

Ku-BAND

13.75 to 14.50 GHz
10.95 to 12.75 GHz

1.2 M Antenna System

Transmit Gain at Mid-Band
Receive Gain at Mid-Band
EIRP
G/T @ 10°elevation
Configuration
Pedestal
Packaging

N/A
N/A
N/A
N/A
N/A
N/A
N/A

43.2 dBi
41.6 dBi
46.0 dBw (2W SSPA)
19.2 dB/k
2 pc.
UNIFOLD Tripod
4 cases total weight 300 lbs

1.8 M Antenna System

Transmit Gain at Mid-Band
Receive Gain at Mid-Band
EIRP
G/T @ 10°elevation
Configuration
Pedestal
Packaging

39.4 dBi
35.2 dBi
47.9 dBw (10W SSPA)
13.8 dB/k
11 pc.
UNIFOLD Tripod
6 cases total weight 490 lbs

45.8 dBi
44.6 dBi
48.6 dBw (2W SSPA)
23.2 dB/k
11 pc.
UNIFOLD Tripod
6 cases total weight 470 lbs

VOICE

- 2 to 8 Voice Channels, Option for Additional Voice Channels is Available

DATA

- 1 Data Port, Option for Additional Data Ports is Available

COMPOSITE DATA RATE

- 64 KHz, Option for Higher Rates Available

VIDEO TELECONFERENCING (OPTIONAL)

- MPEG, 64 Kbps to 1.5 Mbps

INTERNET CONNECTIVITY (OPTIONAL)

- TCP/IP, UDP/IP, E-Mail, Web Browsing, Voice Over IP

FEATURES

- Lightweight Segmented Antenna
- Airline Transportable
- Ultra light UNIFOLD (Patented) Tripod
- Compact and Lightweight
- Signal Acquisition and Operational in Less Than 30 Minutes
- Antenna Tie Down Provisions for High Winds
- Operating Temperature: -20 to +50C Outdoor Equipment
0 to +50C Indoor Equipment
- Prime Power: 110/220 VAC, 47 to 63 Hz

OPTIONS

- Higher Power HPA
- 2.4 Meter Segmented Antenna
- Redundant Configuration
- Dual Band, C- and Ku-Band
- INTELSAT/EUTELSAT Certification
- Spectrum Analyzer for Satellite Acquisition
- GPS Receiver
- Flux Gate Compass
- DC Prime Power
- Contact L-3 Satellite Networks for Special Application Requirements



Safari – Digital Video Flyaway Performance Specifications

Parameter

Transmit Frequencies
Receive Frequencies

C-BAND

5.850 to 6.425 GHz
3.625 to 4.20 GHz

Ku-BAND

14.00 to 14.50 GHz
10.95 to 12.75 GHz

1.2 M Antenna System

Transmit Gain at Mid-Band
Receive Gain at Mid-Band
EIRP
G/T @ 10°elevation
Configuration
Pedestal
Packaging

N/A
N/A
N/A
N/A
N/A
N/A
N/A

43.2 dBi
41.6 dBi
62.5 dBw (125W TWTA)
19.2 dB/k
2 pc.
UNIFOLD Tripod
5 cases total weight 420 lbs

1.8 M Antenna System

Transmit Gain at Mid-Band
Receive Gain at Mid-Band
EIRP
G/T @ 10°elevation
Configuration
Pedestal
Packaging

39.4 dBi
35.2 dBi
64.1 dBw (350W TWTA)
13.8 dB/k
11 pc.
UNIFOLD Tripod
7 cases total weight 570 lbs

45.8 dBi
44.6 dBi
64.8 dBw (125W TWTA)
23.2 dB/k
11 pc.
UNIFOLD Tripod
7 cases total weight 550 lbs

2.4 M Antenna System

Transmit Gain at Mid-Band
Receive Gain at Mid-Band
EIRP
G/T @ 10°elevation
Configuration
Pedestal
Packaging

42.6 dBi
38.8 dBi
67.2dBw (350W TWTA)
17.4 dB/k
11 pc.
UNIFOLD Tripod
7 cases total weight 860 lbs

49.6 dBi
48.0 dBi
69.1 dBw (125W TWTA)
26.4 dB/k
11 pc.
UNIFOLD Tripod
7 cases total weight 800 lbs

ENCODER

- Full Broadcast MPEG2/DVB Compliant
- Analog Composite and Component, SDI optional
- Encoding Rate: 1.5 to 15 Mbps, Higher Rates Optional
- Both PAL and NTSC is Supported
- Up to 2 Stereo Channels (4 Mono)

MODULATOR

- Modulation: QPSK, 8-PSK, 16-QAM
- RF Outputs Available: IF, L-Band, C-Band and Ku-Band

FEATURES

- Compact and Lightweight, Segmented Antenna
- Airline Transportable
- Ultra light UNIFOLD (Patented) Tripod
- Signal Acquisition and Operational in Less Than 30 Minutes
- Antenna Tie Down Provisions for High Winds
- Operating Temperature: -20 to +50C Outdoor Equipment
0 to +50C Indoor Equipment
- Prime Power: 110/220 VAC, 47 to 63 Hz

OPTIONS

- Higher Power HPA
- Redundant Configuration
- Dual Band, C- and Ku-Band
- INTELSAT/EUTELSAT Certification
- Two Way Digital Voice Link for Coordination and Control
- Extended Frequency Bands
- Spectrum Analyzer for Satellite Acquisition
- GPS Receiver
- Flux Gate Compass
- DC Prime Power
- Contact L-3 Satellite Networks for Special Application Requirements



Safari

Performance Specifications - Tri-Band Satellite Terminal (FTSAT)

Field Proven FTSAT System Performance

Parameter	C-Band	X-Band	Ku-Band	Units
Receive Frequencies	3.625 - 4.200	7.25 - 7.75	10.95 - 12.75	GHz
Transmit Frequencies	5.850 - 6.425	7.90 - 8.40	14.00 - 14.50	GHz

1.8 Meter Antenna Subsystem AN/USC-60

Transmit Gain	38.8	41.6	46.4	dBi
Receive Gain	34.7	40.8	44.4	dBi
G/T	15.1	18.7	22.7	dB/K
EIRP (Linear)	58.5	61.5	64.0	dBW
EIRP (Saturated)	63.9	67.5	71.3	dBW

2.4 Meter Antenna Subsystem AN/USC-60A

Transmit Gain	42.2	45.1	49.3	dBi
Receive Gain	38.2	44.2	47.3	dBi
G/T	18.8	21.7	26.0	dB/K
EIRP (Linear)	61.5	64.8	66.5	dBW
EIRP (Saturated)	67.9	70.8	73.8	dBW

Modulation/Throughput.....BPSK, QPSK, OQPSK. 8PSK @ 9.6 kbps to 9.4 Mbps

Antenna TrackingStandard: Manual
Option: Automatic/Motorized for 2.4 Meter Antenna

Terminal Packaging1.8 Configuration: 8 Transit Cases (Total Maximum Weight is 860 lbs.)
2.4 Configuration: 12 Transit Cases (Total Maximum Weight is 1,290 lbs.)

Environment Wind Loading25 MPH Unstaked
45 MPH Steady State, Anchored
60 MPH Gusts, Anchored

Temperature-20°C to +50°C (Operating)
-40°C to +70°C (Storage)

SatellitesINTELSAT, DSCS, NATO, PANAMSAT, EUTELSAT, DOMSATS, etc.

Prime Power.....110/240 VAC $\pm$ 10%, 47 to 63 Hz

Set-up Time45 Minutes (typ.)

The Terminal Has an Extensive Range of Options Available.

Features

- Lightweight 1.8 Meter or 2.4 Meter Segmented Antenna
- DSCS Certified
- INTELSAT Qualified
- Airline Transportable
- Laptop Computer
- Control and Monitoring Subsystem
- Compact and Lightweight
- Advanced RF Architecture
- UNIFOLD (Patented) Mechanical Design
- Hub Independent Set-Up
- Built-in Self Test Capability
- Signal Acquisition and Operational Within Minutes
- GPS Receiver
- Flux Gate Compass
- Tri-Band Test Translator
- Fiber Optic IFL
- IF Spectrum Analyzer
- Environmentally Protected Equipment Operation
- Antenna Tie-Down Provisions for High Wind Operation
- Automatic Tracking Subsystem for the 2.4 Meter Antenna (Patented)
- Interactive Training CD

Approved for Public Release by
DEFOISR Case No. 01-S-3471

Options

- Single/Dual Band Configuration
- Other Antenna Sizes and Various HPA Power Levels
- Ka-Band
- Orderwire
- TSSP

