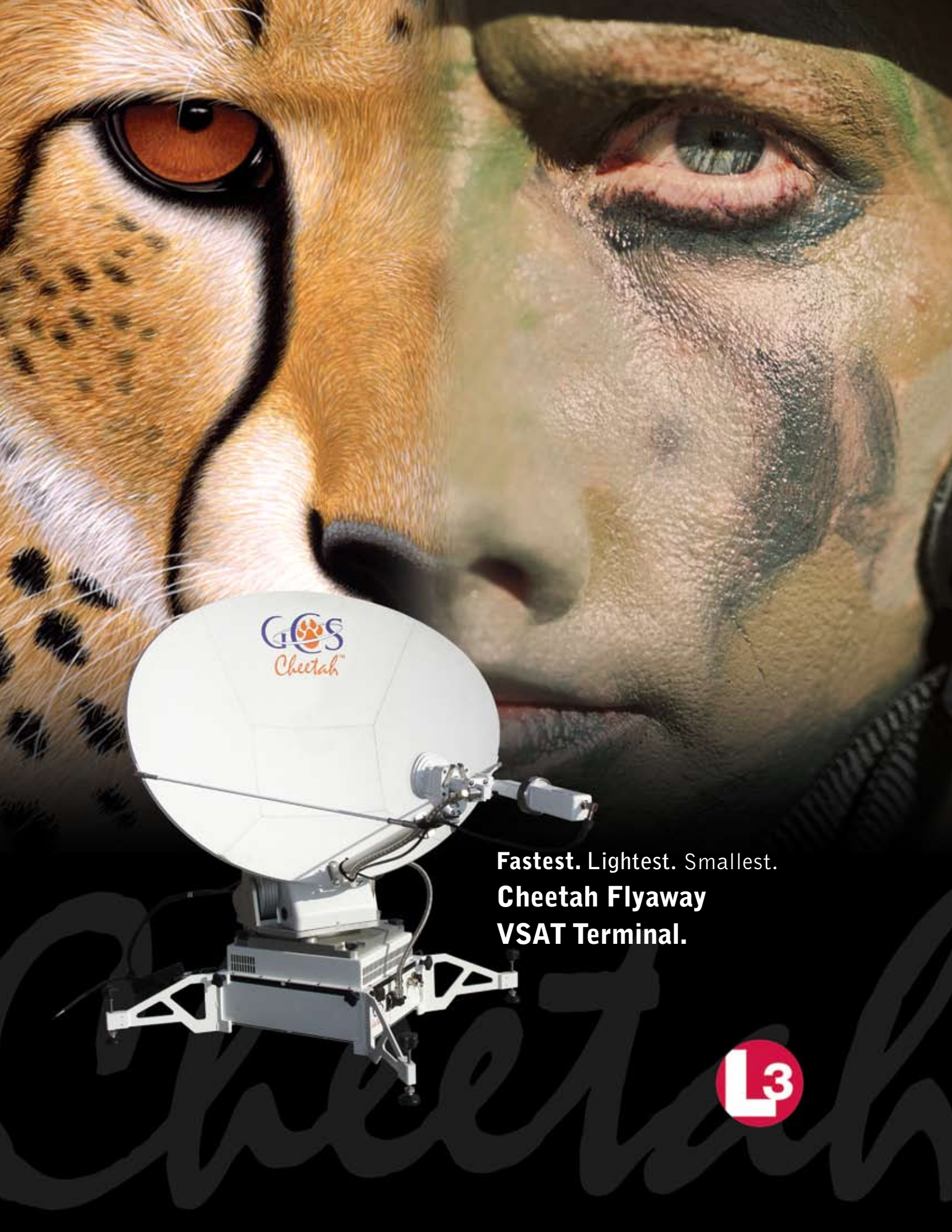
GCS
Cheetah™
Fastest. Lightest. Smallest.
Cheetah Flyaway
VSAT Terminal.
L3

Meet The Cheetah™

The industry renowned Cheetah™ is a completely auto-acquiring flyaway VSAT system that provides high-speed data communications for Internet, VPN connectivity, video transmission, surveillance, or reconnaissance. The Cheetah™ is comprised of only two airline checkable* cases!

The Cheetah™ system comes standard in two Hardigg Storm™ wheeled hard cases. Each case weighs less than 75 lbs. and includes a fully auto-acquire .9M elliptical antenna system, outdoor unit with embedded iDirect iConnex™ modem, 25W (40W optional) BUC/SSPA, controller/processor and Ethernet switch. The GCS ViewSAT™ terminal control software provides monitor and control of the terminal through the use of an Intuitive Graphical User Interface (GUI).

Features

- Latest-generation embedded iDirect iConnex™ e800 Evolution modem and 25W (40 W optional) wideband BUC/SSPA. (Also available with iDirect iConnex™ 700 modem.)
- Rugged design for outdoor use in harsh environmental conditions
- Field connectivity over CAT-5 cable eliminates heavy IFL cables
- One button auto-acquisition solution based on proven motorized Roto-Lok cable drive for reliable positioning and algorithms with the latest iDirect SNR tuning
- Includes automatic polarization adjustment that rotates the reflector to align the major axis with the orbital arc for optimum field performance
- Internal power conditioning in accordance with MIL-STD-1275B allowing the Cheetah™ to be powered from military vehicles
- ViewSAT™ Terminal Monitor and Control software simplifies deployment and operation
- Modem bypass capability allows inter-operation with standard L-band modems

Environmental Conditions Capabilities

GCS has completed rigorous MIL-STD-810F testing of the Cheetah terminal at Dayton T. Brown, a certified facility on Long Island, NY.

This testing included the following:

Required Test (MIL-STD-810F)	Results
Temperature – Hot • Method 501.4 Procedure II - Operation. • Table 501.4-II Hot	Passed
Temperature – Cold • Method 502.4 Procedure II Operation Basic Cold (C1)	Passed
Humidity • Method 507.4	Passed
Vibration • Method 514.5 Procedure I • Table 514.5-I Category 4 Restrained Cargo • Truck Transport US Highways (Annex A Para 2.2.1 C1) • Two Wheeled Trailer and Wheeled Vehicles (Annex A Para 2.2.1 C2)	Passed
Shock • Method 516.5 Procedure II Material to be Packaged	Passed
Sand and Dust • Method 510.4 • Procedure I and II	Passed
Salt Fog • Method 509.4	Passed

GCS Cheetah™

The fastest, lightest, smallest auto-acquire terminal in the industry.

**Subject to individual airline regulations*

The first VSAT in the industry available with iDirect iConnex™ e800 Evolution modem – capable of DVB-S2!

Applications

- Quick-deploy voice, data and video communications
- Remote internet/VPN connectivity from anywhere in the world
- Homeland defense/emergency response
- Videoconferencing and surveillance
- SNG and broadcast
- Executive travel
- C3 tactical

Benefits

- Provides VSAT connectivity for voice, data and video broadcast
- Elliptical reflector automatically rotated to align with satellite orbital arc for optimum performance
- One button auto-acquisition with ViewSAT™ terminal software provides rapid system deployment, control and monitoring with minimal training
- High-speed access from remote sites provides timely information to decision makers

System Specifications

Size & Weight:

Number of Cases:	(2) airline checkable hard cases*
Case Size:	
Hard cases (standard):	
Antenna System:	24.6 x 19.7 x 14.4 inches
RF System:	24.6 x 19.7 x 14.4 inches
Weight:	Antenna system – 74 lbs. RF system – 74 lbs.

Power Requirements:

AC Power:	90 – 132 and 180 – 264 VAC auto-ranging; 47 – 440 Hz
DC Power:	28 VDC per MIL-STD-1275B
Consumption:	1000 VA Max

Environmental:

Temperature:	
Operational:	-32° to + 50°C
Storage:	-40°C to + 60° C
Wind Loading:	
Operational:	25 mph
Survival:	30 mph gusting to 45 mph with anchoring weights

Ordering Information:

GCS-2170 Optional DSL port	Cheetah™ .9M auto-acquire VSAT flyaway system with iDirect iConnex™ 700 modem, and (4) LAN ports, 25W SSPA
GCS-2170-040 Optional DSL Port	Cheetah™ .9M auto-acquire VSAT flyaway system with iDirect iConnex™ 700 modem and (4) LAN ports, 40W SSPA
GCS-2180 Optional DSL port	Cheetah™ .9M auto-acquire VSAT flyaway system with iDirect iConnex™ e800 Evolution modem, and (4) LAN ports, 25W SSPA
GCS-2180-040 Optional DSL Port	Cheetah™ .9M auto-acquire VSAT flyaway system with iDirect iConnex™ e800 Evolution modem and (4) LAN ports, 40W SSPA

W – White, T – Tan, G - Green

**Subject to individual airline regulations*

This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11.

Antenna & RF System:

Reflector:	90 x 66 cm Elliptical
Optics:	Offset, Prime Focus
Reflector Construction:	Segmented Carbon Fiber
Az/El/Pol Drive System:	Patented Roto-Lok 3-axis Positioner
Polarization Adjustment:	Rotation of Reflector/Feed about Boresight
Controller:	DVB reference satellite or iDirect SNR tuning. One button deploy fully automatic satellite acquisition, peaking, and cross pol adjustment using GPS, compass and level sensor inputs, certified for auto-commissioning on certain satellite systems; one button stow
Auto Positioning Accuracy:	< +/- 0.1°
Operator Control:	Via ViewSAT™ terminal monitor and control software
Interface:	CAT-5 Cable (4) 100 Base-T Ethernet ports Or (3) 100 Base-T Ethernet and (1) DSL ports (optional)
Elevation:	15 to 75° of boresight
Azimuth:	180°
Polarization:	Motorized +/- 75° manual H/V selection
G/T:	17.4 dB/K @ 20° elevation
EIRP:	51.8 dBW (25-watt SSPA) (53.8, 40W)
LNB:	Three provided to ensure global coverage of the Ku-Band;
Band 1:	10.95 – 11.70 GHz: NF=.8dB
Band 2:	11.70 – 12.20 GHz; NF=.8dB
Band 3:	12.25 – 12.75 GHz; NF=.8dB
Frequency: Transmit:	13.75 – 14.5 GHz
Receive:	10.95 – 12.75 GHz
Antenna Midband Gain:	Transmit: 39.0 dBi
	Receive: 37.8 dBi
TX Radiation Compliance:	FCC #25.209, ITU-R S.528.5
Cross-Pol Isolation:	
On-Axis:	35 dB TX 30 dB RX
Off-Axis:	28 dB TX 28 dB RX
Satellite System Compliance:	PanAmSat, Intelsat, Eutelsat
Satellite Approval:	PanAmSat USA-8189 FCC SES-STA-20080606-00713

Specifications subject to change without notice

L3 communications GCS

Headquarters: L-3 GCS
7640 Omnitech Place • Victor, NY 14564 USA
Web site: www.L-3com.com/GCS
E-mail: GCS.information@L-3com.com

Rev. D – July 2010