Cheetah Flyaway
VSAT Terminal.
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 lb. and includes a fully auto-acquire .9M elliptical antenna system, outdoor unit with embedded iDirect iConnex™ modem, 40 W 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 40 W wideband BUC/SSPA.
- 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:

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<th>Required Test (MIL-STD-810F)</th>
<th>Results</th>
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*Subject to individual airline regulations
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

Cheetah Battery Box

• 30-90 Minutes of battery backup depending on usage
• LED Display
• Blackout switch
• Lightweight (25.5lb)
• Dimensions 16.2” x 12.7” x 6.6”
• Contains 4 UBI-2590 rechargeable batteries
• Wide AC input range 85 V to 264 VAC
• Weatherproof when closed
• Operating Temperature 5 °C to 38 °C (limited by UBI-2590 capability)
• Filtered AC throughput
• Transition in AC Power to DC power without disruption
System Specifications

Size & Weight:
- Number of Cases: (2) airline checkable hard cases*
- Case Size:
  - 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 lb.
  - RF system – 74 lb.

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

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

Ordering Information:
- GCS-2180-040 Cheetah™ .9M auto-acquire VSAT flyaway system with iDirect iConnex™ e800 Evolution modem and (4) LAN ports, 40W SSPA
- BB-2100-04 Optional Battery Box

**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)
- G/T: 17.4 dB/K @ 20° elevation
- EIRP: 51.8 dBW (25-watt SSPA) (53.8, 40 W)
- LNB: Three provided to ensure global coverage of the Ku-Band;
- Band 1: 10.95 to 11.70 GHz; NF=.8dB
- Band 2: 11.70 to 12.20 GHz; NF=.8dB
- Band 3: 12.25 to 12.75 GHz; NF=.8dB
- Frequency: Transmit: 13.75 to 14.5 GHz
  - Receive: 10.95 to 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.

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

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