



**Fastest. Lightest. Smallest.
Cheetah Flyaway
VSAT Terminal.**



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 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:

| Required Test (MIL-STD-810F) | Results |
|---|---------|
| Temperature – Hot <ul style="list-style-type: none">• Method 501.4 Procedure II - Operation.• Table 501.4-II Hot | Passed |
| Temperature – Cold <ul style="list-style-type: none">• Method 502.4 Procedure II Operation Basic Cold (C1) | Passed |
| Humidity <ul style="list-style-type: none">• Method 507.4 | Passed |
| Vibration <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Method 516.5 Procedure II Material to be Packaged | Passed |
| Sand and Dust <ul style="list-style-type: none">• Method 510.4• Procedure I and II | Passed |
| Salt Fog <ul style="list-style-type: none">• Method 509.4 | Passed |

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



*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:

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 lb.
RF system – 74 lb.

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 °C 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-2180-040 Cheetah™ .9M auto-acquire VSAT
Optional DSL Port 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)

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, 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.

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