TOUGHSAT
MOBILE FLYAWAY HOTSPOT
A Portable Satellite Wi-Fi Internet Hotspot

A Case-Based Mobile Satellite Internet System

Go where cell access is not available. The Toughsat Flyaway mobile satellite system is easily transported and deployed by one person for highspeed connectivity using Commercial Grade iDirect from any location. With an integrated wireless access point, this satellite solution can become a multi-user hotspot in minutes. And with Dual Matrix service, you can choose from one of two satellites with a touch of a button (North America only).

Our Flyaway bracketing allows the Toughsat to be easily mounted on the ground, or on top of any vehicle roof rack, even rental vehicles. With the largest case length under 62", the Toughsat flyaway can easily fit into most SUV or other vehicle cargo areas. Power requirements are minimal and can be supplied by a mini-inverter from a vehicle power port, or from a portable generator.

Our VoIP phone service is optimized for satellite communication and many are often unaware they are speaking over a satellite link. At $49.95 a month which includes 1000 free minutes, phone service is viable at any location. The Toughsat Flyaway Case - Portable Cost Effective Communications

Toughsat Flyaway Features:

- One Operator Simplicity - No Certification Required
- Single Source Provider for Equipment, Service and Support
- Ground Mounting and Roof Rack Mounting (Fly-and-Drive)
- Comercial Grade iDirect Service - Global Network
- Creates Wi-Fi hotspot in 3.5 minutes automatically
- Dual Matrix Service - Two satellites for redundancy
- Ideal for VoIP phone service - Very low latency
- Shippable - Under UPS-FedEx-DHL limits (.98m system)
- Low power usage - 90 watts average (150 watts max draw)
- Works in extreme environments. Hot-Cold-Rain-Snow
- Manufactured and supported by Ground Control
- Available in .98 meter or 1.2 meter dish sizes
- 24-7 U.S based support & nationwide field technicians

GROUNDCONTROL

GroundControl.com

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Little or no training is necessary to operate the system. Once the power is on, simply press the Deploy button on the ACU (Antenna Control Unit) and the dish will deploy, lock on the satellite and create a high-speed wireless "G" network in about 3.5 minutes automatically. It really is that simple. Port

GENERAL FEATURES

+ Manufactured by Ground Control.
+ One-button operation.
+ Requires little or no training to operate.
+ No certification or licensing to operate.
+ Dish peaking accuracy is within 0.1 degrees with near zero play.
+ Typical seek time to find and lock on satellite is 3.5 minutes.
+ Establishes a self-contained local area network with one button.
+ Establishes a wireless access point and wiring to computers is optional.
+ System is not affected by magnetic distortions to lock on any satellite.
+ Operates globally in both hemispheres.
+ 6 watt transmitter with 8 Watt optional.
+ Can find any liner Ku-Band satellite.
+ Modular design - components easily replaced if problems occur.
+ Operational in high winds.
+ Operational in temperatures of -20° F to 140° F at 100% humidity.
+ No software to install.
+ Computer control is not required.
+ Autostow safety features if rig is moved or dish goes off signal.

Wireless 1RU ACU (Dish Controller)

+ The front of the ACU has buttons for Deploy, Stow, Stop, Sat 1 and Sat 2.
+ Dual Matrix - Redundant satellite service
+ Integrated wireless 4 port router.
+ No fan required - Operates silent.
+ Browser accessible interface screen.
+ Intuitive Interface screens controls dish parameters and firmware updates.
+ Manual overrides for dish pointing, GPS, Autostow, router, gateway.
+ Networking Overrides for IP Address, Subnet Gateway address, DNS

Diagnostic & Updating

+ Lifetime free firmware upgrading with easy one-button updates with active Ground Control account.
+ System provides accurate technical diagnostics without dispatching a technician to rig site.
+ Remote access into system from Ground Control for performance tuning and troubleshooting.
+ System provides historical log of events for accurate diagnostics

MAIN CASE Specifications
Toughsat (Same for both .98 and 1.2 systems) .... Compatible with Toughsat XP or SP
External Dimensions ....61.25" x 21.75" x 16" (155.6 x 55.24 x 40.64 cm)
Weight .98 dish (loaded) ....149 lbs (67.59 kg) Under shipping weight limits
Weight 1.2 dish (loaded) ....160 lbs (72.57 kg)

DISH & BAG Specifications
Reflector Types...0.98 or 1.2 square meter elective area
External Dimensions .98 Meter Dish ....39" x 4" depth (99.06 x 10.16 cm)
External Dimensions 1.2 Meter Dish ....48" x 5" depth (122 x 12.7 cm)
Weight (both systems)...98m- 26 lbs (11.79 kg), 1.2m 35 lbs (15.88 kg)

RACKMOUNT CASE (6U)
External Dimensions (same for both .98 and 1.2).......21.75" x 24.75" x 14 (55.24 x 62.86 x 35.56 cm)
Weight ....33 lbs (14.97 kg)
Components ....Dish Controller, iDirect Router, Power Conditioner
Cable Run ....25' (7.6 Meters) watertight. 50' and 100' runs available

The Flyaway is easily setup by one person

BRACKETING & DOLLY BAG
External Dimensions..63" x 8" x 8" (158 x 20 x 20 cm)
Weight ....28 lbs (13 kg)
Other Components...Hardware and tools

DISH ROTATION
Azimuth .... 410°
Elevation..165°
Polarization ....+-80°

RF INTERFACE
Transmit Power..6 watts BUC
Receive Frequency ....Range 950-1450 mhz

ENVIRONMENT
Max Operational Temperature (at 100% humidity)...............Operational -20° F to 140° F (-28° C to 60° C)
Max Survival Temperature (at 100% humidity) ....-60° F to 160° F (-51° C to 71° C)

POWER REQUIREMENTS
Dish Controller & Dish Motors (Via 120 VAC).......................... 15 watts (can be turned o after pointing)
iDirect Modem (via AC120V to DC 24V @ 5 Amp)................... 75 watts

Toughsat TS2 ACU (Antenna Control Unit)

One button operation with Dual Matrix Service for the ultimate in redundant satellite communications.

SATELLITE NETWORK - iDirect (Flyaway may be used with any Ku-Band provider & satellite router)
Satellite Router (optional0.. iDirect Evolution X5 Series Router
Max Download .... Varies. Dependent on location
Max Upload.. Varies. Dependent on location
Public (Static) IP Address .... Included
DHCP.. Yes. Wireless or 4 port Ethernet
NAT... Supported by included router
Wireless Security... WPA (TKIP) WPA2 (AES) + WEP 64 and 128bit
Firewall .... Supported by included router
Port Mapping & Port Triggers.. Supported by included router
QoS, ToS, MAC Address Clone, RIP v1 RIP v2............ Supported by included router
Networkable clients machines .... Unlimited
Wireless... Cisco Linksys wireless router "G"

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