



# Mobile Satellite Internet Broadband Access

## General Specifications:

- Always-on Broadband Internet Access
- Two-way Satellite Connection
- Downlink speeds from 512kbps to 2Mbps
- Uplink speeds from 128kbps to 1Mbps
- Contention: 50:1 (4:1 statistical)
- TCP acceleration (supports 10Mbps)
- Motorised dish that stows flat when not in use
- Simple one-button operation
- 60mph wind operational capability

## Example Applications supported:

- Mobile Internet access
- Mobile medical scanners
- Emergency services
- Mobile libraries
- Education
- Civil Defence
- Telemedicine
- File Transfer Protocol (FTP)
- Virtual Private Networks (VPN)
- Webcam Video
- VoIP
- Wireless Networks

## Technical Specifications:

### > Return Channel (Uplink)

**Format:** MF-TDMA  
**Turbo Coding:** DVB-RCS compliant

### > Outbound Channel from Hub (Downlink)

**Format:** DVB/MPEG-2 Transport Stream  
 (ISO/IEC 13818) DVB Multi-Protocol  
 Encapsulation (MPE) for IP Data PCR Insertion  
**FEC:** DVB Compliant

### > RF

**ODU Power:** 2W, 4W Ku-Band  
**ODU Operating Temperature:** -40°C to 55°C

### > IDU Physical Interfaces

**L-band Transmit and Receive:** (2) Type F, 75 ohm  
**Network:** (1) 10/100 Base T Ethernet (RJ-45)

### > Motorised Antenna System

**Mount Geometry:** Elevation over Azimuth  
**Polarization Axis:** Rotation of Reflector/Feed System about Boresight Travel

**Azimuth:** 400° or ±200° from Stow Position  
**Elevation:** -Operational 0-65° or 0-90° of boresight Total 0-150°

**Polarization:** ±95°  
**Speed:** Slewing/Deploying 10°/sec. in Azimuth, 5°/sec. in Elevation, 5°/sec. in Polarization, Peaking 0.2°/second

**Wind:** Survival Deployed 80 mph, Stowed 140 mph  
 Operational –Tracking 60 mph at 60° F

**Boresight Backlash:** Az Degrees .01 dB, El Degrees .05 dB  
 Pol Degrees .05 dB

**Beam Deflection-Transmit:** 20 mph .2 dB, 30 gusting to 45 mph .5 dB  
**Temperature:** Operational -20°F to 125°F, Survival -30°F to 125°F

**Weight:** 100 lbs.

**Automatic Mode Input:** Automatically Locates, Peaks-Up, and Minimizes Cross-Pol

## Need transportable broadband connectivity?

We can provide broadband Internet access mounted on vehicles or on transportable platforms to enable you to have connectivity wherever you need to be. Motorised dishes are sturdy and reliable and will find the satellite automatically wherever you are.

## Fast, reliable communications up to 40x faster than dial-up!

Choose from two standard IP Broadband services to provide the broadband speed you require. Top of the range provides an uplink data speed of a massive 1Mbps able to support high speed data streaming. Customised services can also be supported.

## Backed by Eutelsat, the largest European satellite operator

Eutelsat who are the leading European satellite operator with 24 satellites providing near full global coverage supports the DStar service via their Skylogic subsidiary. Orbit Research Ltd, a highly respected and technically experienced DStar distributor, supply DStar service to Prime Satellite Broadband.

## IP BROADBAND SERVICES

DSTAR Service	Downlink <sup>1</sup>	Uplink <sup>1</sup>	Max. IP Addresses <sup>2,3</sup>	Contention <sup>4</sup>
MIDAS	1024kbps	512kbps	13	50:1
HERCULES	2048kbps	1024kbps	29	50:1

Notes:

1. Speeds are maximums on a shared contended link.
2. 3 additional IP addresses are allocated for the gateway, broadcast and network.
3. Additional PCs/devices can be supported in local network via NAT server.
4. Number of times bandwidth is shared defines minimum guaranteed data rates, typical average data rates are higher.

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Via

