Inmarsat's Broadband Global Area Network service – BGAN

 is accessible via a small, lightweight, satellite terminal, which is easy to carry, quick to set up and simple to use. And you can use the same device worldwide.

A range of terminals is available, providing performance options to suit different operational needs. The service is accessed via BGAN LaunchPad, a software interface, which is standard across all terminals.







EXPLORER™ 700

Multi-user device with extensive functionality

The Thrane & Thrane EXPLORER™ 700 combines optimal performance with extensive functionality in an extremely flexible and robust design. It provides access to the highest bandwidth available on the BGAN network with multiple voice and data interfaces, including WLAN connectivity.

The terminal has a detachable, highly durable antenna, enabling indoor or outdoor use. It is ideal for live video applications or for teams to share in a temporary office environment, whatever the climatic conditions.

Applications

- Remote access high-speed access to your corporate network, enabling access to company and customer information.
- **Internet access** access the Internet at speeds up to 492kbps.
- **Email** send and receive email via the Internet or email applications.
- Telephony make phone calls via a peripheral handset at the same time as accessing data applications.
- **Streaming** select guaranteed quality of service up to 256kbps on demand, e.g. for video, audio.
- File transfer send and receive large files.
- **Store and forward** save and send files e.g. video.

Key benefits

Simultaneous voice and broadband data – access your data applications and make a phone call at the same time via a Bluetooth handset or standard desktop phone. It supports streaming IP at speeds up to 256kbps on demand and ISDN at 64kbps.

Highly flexible – designed as two separate units so the antenna can be placed outside, while you work indoors. Multi-user support enables an entire team to share a single unit, enabling an instant broadband LAN. Supports both circuit-switched and IP packet data via USB, two Ethernet ports, Bluetooth, two ISDN ports and WLAN interfaces.

Extremely robust – the detachable antenna is purposely designed to operate in extremely challenging environmental conditions.

Very portable – allows you to move from site to site quickly and be connected again within minutes.

Global coverage – provides service anywhere within the BGAN coverage area.

Easy to use – The BGAN service can be accessed and managed via BGAN LaunchPad on your laptop or the terminal's built-in web interface or from the built-in display and keypad.



Weight 3.2kg (7.0lbs) **Dimensions**

Length: 297mm (11.7")

Width: 399mm (15.7") Depth: 51mm (2.0")

Interfaces

Antenna USB 2 x Ethernet Bluetooth, class I - Supported profiles -Serial port -Dial-up networking

-LAN access

-Cordless telephony WLAN access point

- 802.11a/b/g

- Encryption (WEP/WPA/WPA2)

- DHCP 2 x ISDN 64kbps - 3.1kHz audio RDI & UDI 2 × R111

2 x Digital I/O 12V Solar panel

User access Via activated 3G compatible SIM card

User interfaces

BGAN LaunchPad

T&T web interface

On terminal Terminal control buttons and LCD

Power

Power supply AC/DC, AC via external adaptor External power 100-240 Volts AC (47-63Hz) Transmit: 1.5 hours at 492kbps **Battery life** Stand-by time: 36 hours

Lithium-ion. Rechargeable **Battery type**

Input voltage 10-32 Volts DC

Tolerances

Ambient operating temperature

Powered from external DC -25°C to +55°C (-13°F to +131°F) Powered by battery only 0°C to +55°C (+32°F to +131°F)

0°C to +45°C

Charging temp (+32°F to +113°F)

Relative humidity:

95% non-condensing at +40°C (+104°F)

Water and dust IP 52 - transcriver IP 66 - antenna (Ingress protection)

Radio specifications

Maximum radiated power (EIRP)

Operating humidity

+20dBW ±1dB

Supported operating systems

Operating system

Windows: 2000, XP MAC: OS 10.1 or later Linux: Redhat 9

Data capabilities

IP data

Background class of service Standard IP

Send: up to 492kbps over shared channel

Receive: up to 492kbps over

a shared channel

Streaming IP Guaranteed quality of service Send: 32, 64, 128, 256kbps

Receive: 32, 64, 128, 256kbps Multiple IP streaming sessions simultaneously

UDI/RDI (64kbps) ISDN data SMS 160 characters

Voice capabilities

Voice 4kbps

> 3.1kHz audio Voicemail Call forwarding

> > Call barring Call waiting Call holding

Accessories

Supplementary

services

AC/DC

Cabling Ethernet (2m), USB (1.8m) Voice handset EXPLORER™ Bluetooth handset, 2m charger cable

> + desk top charger cradle 100/240 Volts (AC)

power adaptor **AC** power plug

Car charger

2 pin European type Cable with cigarette lighter plug

0

0

0

0

Solar panel Off the shelf (please check with manufacturer)

Pole mount kit Spare battery

For external antenna Standard Li-ion battery Canvas bag

Antenna cable Other

Bag

41.5 cm. 10 m Antenna cable: 10m (3mm) 30m (5mm), 60m (10mm) - flexible, 100m (10mm) to connect the transceiver and

antenna in 'split' configuration

5 Standard Optional

How to buy

The EXPLORER™ 700 is available from more than 100 Thrane & Thrane partners worldwide, covering Europe, Africa, the Middle East, Asia, North and South America. Visit www.thrane.com to select the best supplier for you.

About Thrane & Thrane

Thrane & Thrane is the world's leading manufacturer of terminals and land earth stations for global mobile satellite and radio communications. Since its incorporation in 1981, the company has established a strong position within global mobile satellite services based on the Inmarsat system, and today it provides equipment for land-based, maritime and aeronautical use. The company is listed on the Copenhagen Stock Exchange. www.thrane.com



For more details on this product, please contact Thrane & Thrane.

www.inmarsat.com

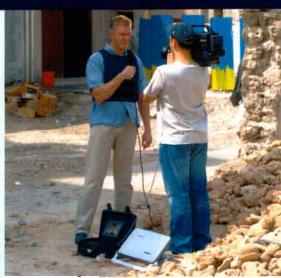
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A range of terminals is available, providing performance options to suit different operational needs. The service is accessed via BGAN LaunchPad, a software interface, which is standard across all terminals.







HNS 9201

High performance, multi-user device

The HNS 9201 combines ultimate performance with an extremely rugged design. It provides access to the highest bandwidth available on the BGAN network and supports WLAN connectivity.

It is ideal for either single users using bandwidthhungry applications, such as live video, or for small teams which need to set up a temporary office with high-speed connectivity to standard data applications.

Applications

- Remote access high-speed access to your corporate network, enabling access to company and customer information.
- Internet access access the Internet at speeds up to 492kbps.
- Email send and receive email via the Internet or email applications.
- Telephony make phone calls via a peripheral handset at the same time as accessing data applications.
- Streaming select guaranteed quality of service up to 256kbps on demand, e.g. for video, audio.
- File transfer send and receive large files.
- **Store and forward** save and send files e.g. video.

Key benefits

Simultaneous voice and broadband data -

access your data applications and make a phone call at the same time. For applications where quality of service is paramount, you can select streaming IP services up to 256kbps on demand. Also supports ISDN at 64kbps.

Global coverage – provides service anywhere within the BGAN coverage area.

Extremely robust – can be installed outside in extreme weather conditions for extended periods of time.

Highly flexible – easy to use in both portable and semi-fixed contexts. Multi-user support allows an entire team to share a single unit, enabling an instant broadband local area network. Supports both circuit-switched and IP packet data via USB, Ethernet, ISDN and WLAN interfaces.

Easy to use – simply plug in a phone or laptop, point to the satellite and connect.

Very portable – allows you to move it from site to site quickly and easily and be connected again within minutes.





Weight 2.8kgs (6.2lbs) **Dimensions** Length: 345mm (13.6") Width 275mm (10.8") Depth: 50mm (2.0")

Interfaces USB

Ethernet

WLAN access point (up to 100m)

- 802 IIb - Encryption (WEP) - DHCP ISDN 64kbps - 3.1kHz audio - RDI & UDI

User access Activated via 3G compatible SIM card

User interfaces PC

BGAN LaunchPad On Terminal Terminal control buttons and LEDs

Power

Power supply AC or DC

External power 20 Volts DC, 110 240 Volts AC Battery life Transmit: 162Mb via Ethernet

Receive: 864Mb via Ethernet Stand-by time: 36 hours

Lithium-ion, Rechargeable Battery type II.I Volts DC Input voltage

Tolerances

Ambient operating temperature

Powered from external DC -25°C to +60°C (+13°F to +140°F)

Powered by battery only -5 °C to +55°C

(+23°F to +131°F) 0 C to +40 C Charging temp (+32 F to +104 F)

Operating humidity Relative Humidity: 95% non-condensing

at +40°C (+104°F)

Water and dust (Ingress protection) IP 55

Radio specifications

Maximum radiated +20dBW power (EIRP)

Supported operating systems

Operating system Windows: 2000, 💯

MAC: OS 10.1 or later Linux: Redhat 9 (no USB support)

Data capabilities

IP data

Streaming IP

ISDN data

SMS

Standard IP Background class of service

Send: Up to 492kbps over a shared channel Receive: Up to 492kbps over a shared channel Send: 32, 64, 128, 256kbps Receive: 32, 64, 128, 256kbps

Multiple IP streaming sessions simultaneously UDI/RDI (64kbps) 160 characters

Voice capabilities

Voice 4kbps

3.1kHz audio Supplementary

services

Voicemail Call forwarding Call barring Call waiting Call holding

Accessories

Cabling USB, Ethernet, ISDN (all 3m) Compatible - ASCOM Eurit 33

voice handsets + deskphone

- SwissVoice Eurit 25 + 35 deskphone

- Siemens Gigaset SX255 cordiess DECT ISDN phone

- Nera F77 - Nera WorldSet 110/240 Volts

AC/DC power supply

Power plug 2 pin US type plus adaptor kit for most other countries

Car charger

SMP, 10-32 VDC input. 0 20VDC output, 55W - IDG Europe T-60

Solar charger

- Powerline Suncatcher F0002 Fixed installation kit includes:

Fix mount kit

- terminal pole mounting kit - 30m DC extension cable to be used with standard AC/DC adaptor

- Two 30m Ethernet/ISDN cables

Spare battery

- lightning protection strap Extended battery with 50% increased capacity

Standard C Optional

How to buy

The HNS 9201 is available from distribution partners worldwide, covering Europe, Africa, the Middle East, Asia, North and South America. Visit www.hns.com to select the distribution partner nearest to you.

About HNS

Hughes Network Systems, LLC (HNS), is the world's leading provider of broadband satellite network solutions for businesses and consumers, with more than one million systems ordered or shipped to customers worldwide. Headquartered outside Washington, D.C. in Germantown, Maryland, USA, HNS maintains sales and support offices worldwide and employs approximately 1,500 people in engineering, operations, marketing, sales and support. It operates manufacturing facilities in Gaithersburg, Maryland. HNS is certified to the ISO-9001 standard.

www.hns.com

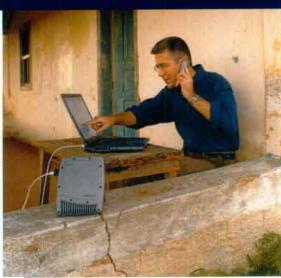


For more details on this product, please contact Hughes Network Systems Inmarsat's Broadband
Global Area Network
service – BGAN
– is accessible via a small,
lightweight, satellite
terminal, which is easy to
carry, quick to set up and
simple to use. And you
can use the same device
worldwide.

A range of terminals is available, providing performance options to suit different operational needs. The service is accessed via BGAN LaunchPad, a software interface, which is standard across all terminals.







Nera WorldPro 1000

The smallest, lightest device in the range

The Nera WorldPro 1000 combines an exceptionally compact design with performance and optimal flexibility. The terminal can be separated into two parts, so users can choose between indoor and outdoor use, with no need for an external antenna.

Combined with the Nera WorldSet for voice telephony, it is ideal for single users, who need to set up a complete broadband mobile office in frequently changing locations.

Applications

- Remote access high-speed access to your corporate network, enabling access to company and customer information.
- Internet access access the Internet at speeds up to 384kbps.
- **Email** send and receive email via the Internet or email applications.
- Telephony make phone calls via a peripheral handset at the same time as accessing data applications.
- **Streaming** select guaranteed quality of service up to 64kbps on demand, e.g. for video, audio.
- File transfer send and receive large files.
- Store and forward save and send files e.g. video.

Key benefits

Ultimate portability – at around half the size of a laptop and weighing less than 1 kilo, it is the smallest and lightest terminal in the range.

Simultaneous voice and broadband data – access your data applications and make a phone call at the same time, via the Nera WorldSet. The terminal can also be configured directly from the handset.

Highly flexible – designed to split into two separate units, so the antenna can be placed outside, while you work indoors in comfort – with no requirement for an additional external antenna. The terminal can be connected to a laptop via the USB port or Bluetooth, and via Ethernet from Q2 2006

Global coverage – provides service anywhere within the BGAN coverage area.

Easy to use — with the one-patch antenna design, it takes less than a minute to locate a satellite communications signal. The service can be accessed via BGAN LaunchPad on your laptop, or an on-box user interface with self-explanatory indicators.

Robust – purposely designed to operate in challenging environmental conditions.





Weight Dimensions < 1.0kg (2.2lbs)

Length: 200mm (7.9") Width: 140mm (5.5") Depth: 40mm (1.6")

Interfaces

USB

Bluetooth (up to 20m) - Supported profiles:

- Service discovery application
- Serial port
- Dial-up networking
- Headset profile from Q2 2006
- Cordless telephony Ethernet from Q2 2006

RJ45 (for Nera WorldSet) User access Via activated 3G compatible SIM card

User interfaces

BGAN LaunchPad

On terminal Terminal control buttons and LCD

WorldSet display and handset

Power

Power supply AC or DC

External power 12 Volts DC, 110 240 Volts AC

Battery life

Transmit time: 5 hours Typical use

Stand-by time: 36 hours Lithium-ion. Rechargeable

Battery type 10.8-15.6 Volts DC Input voltage

Tolerances

Ambient operating temperature

Powered from external DC -20°C to +55°C

(+4°F to +131°F) -20°C to +55°C

Powered by battery only (+4°F to +131°F)

0°C to +55 C Charging temp

 $(+32^{\circ}F to + 131^{\circ}F)$

Operating humidity Relative humidity:

95% non-condensing

at +40°C (+104°F)

Water and dust IP 44

(Ingress protection)

Radio specifications

Maximum radiated power (EIRP)

+10dBW

Supported operating systems

Operating system

Windows: 98SE, 2000, XP MAC: OS 10.1 or later Linux: Redhat 9

Data capabilities

IP data

Standard IP

Streaming IP

Background class of service Send: Up to 240kbps over

a shared channel Receive: Up to 384kbps over a shared channel Guaranteed quality of service

Send: 32, 64kbps Receive: 32, 64kbps

ISDN data N/A

SMS 160 characters

Voice capabilities

Supplementary services

Voicemail Call forwarding Call barring Call waiting Call holding

Accessories

Cabling USB (1.8m) Voice handset

Wired: Nera WorldSet (with 2m cable)/ other ISDN phones Wireless: Bluetooth handset

110/240 Volts

power supply

AC/DC

Power plug Car charger

2 pin European type Off the shelf (please check with manufacturer) Off the shelf (please check O

Solar charger Pole mount kit

with manufacturer) Fixing brackets: window

0

O

Spare battery

mounting kit based on tripod camera mounting thread Standard Nera battery (5 hours use, 36 hours

Bag Other

Antenna cable to connect

the indoor and outdoor units in 'split' configuration DC/DC adaptor input 10-31Volts DC

Colour variations

Standard O Optional

How to buy

The Nera WorldPro 1000 is available through a global distribution network, covering Europe, Africa, the Middle East, Asia, North and South America. Visit www.nera.no to find contact details for all the Nera distributors worldwide.

About Nera SatCom

Nera SatCom is one of the world's leading companies in the field of satellite technology. The company is part of the Nera group with offices in 26 countries and more than 1,000 employees around the world.



For more details on this product, please contact Nera SatCom

www.inmarsat.com/bgan

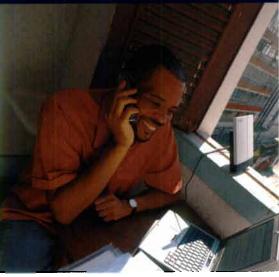
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EXPLORER™ 500

High bandwidth, highly portable device

The Thrane & Thrane EXPLORER™ 500 combines exceptional performance with portability. It meets the needs of the most demanding business traveller for remote, high-speed access to corporate networks. It is also suitable for small teams who need to set up a temporary office.

Applications

- Remote access high-speed access to your corporate network, enabling access to company and customer information.
- Internet access access the Internet at speeds up to 464kbps.
- **Email** send and receive email via the Internet or email applications.
- Telephony make phone calls via a peripheral handset at the same time as accessing data applications.
- Streaming select guaranteed quality of service up to 128kbps on demand, e.g. for video, audio.
- File transfer send and receive large files.
- Store and forward save and send files e.g. video.

Key benefits

Simultaneous voice and broadband data – access your data applications and make a phone call at the same time – via a Bluetooth handset or a standard desktop phone. Also supports streaming IP at speeds up to 128kbps for applications requiring guaranteed quality of service.

Highly portable – smaller than a laptop, the EXPLORER™ 500 represents the ultimate combination of portability and performance.

Global coverage – provides service anywhere within the BGAN coverage area.

Easy to use – simply plug in a phone or laptop, or connect using the Bluetooth interface, point the antenna towards the Inmarsat satellite and you are online.

Highly flexible – caters both to individual users and small teams on the move. Supports circuit-switched and IP packet data via standard LAN, USB, Bluetooth and phone/fax interfaces.

Very robust - splash and dust-resistant.



Weight <1.5kgs (<3.3lbs) Dimensions Length: 217mm (8.5") Width: 217mm (8.5") Depth: 52mm (2.0")

Interfaces USB

Ethernet

Elizationth (up to 100m) - Supporced profiles

-Service discovery application - Serial port

-Dial-up networking -LAN access -Cordless telephony

User access Via activated 3G compatible SIM card

User interfaces

EIGAN LaunchPad Built-in web-server

On terminal Terminal control buttons and LCD

Power

Power supply AC/DC

External power 15 Volts DC, 100-240 Volts AC

(47-63Hz)

Battery life Transmit: 1.5 hours at 144kbps

Stand-by time: 36 hours Lithium-ion, Rechargeable

Input voltage 10-16 Volts DC

Tolerances

Battery type

Ambient operating temperature

Powered from external DC -25°C to +55°C

(-13°F to +131°F) 0°C to +55°C

Powered by battery only (+32°F to +131°F)

0 C to +45 C Charging temp

(+32 F to +113 F)

Operating humidity Relative humidity:

95% non-condensing

at +40°C (+104°F)

Water and dust (Ingress protection)

IP 54

Standard IP

Data capabilities

Background class of service Send: up to 448kbps over

a shared channel

Receive: up to 464kbps over

a shared channel

Streaming IP Guaranteed quality of service

Send: 32, 64, 128kbps Receive: 32, 64, 128kbps Multiple IP streaming sessions simultaneously UDI (64kbps) - via USB

ISDN data

SMS 160 characters

Voice capabilities

Voice 4kbps

3.1kHz audio

Supplementary services

Voicemail Call forwarding Call barring Call waiting Call holding

Accessories

Cabling Ethernet (2m), USB (2m) Voice handset EXPLORER™ Bluetooth handset, 2m charger cable + desk top charger cradle AC/DC 100/240 Volts

power supply Power plug Car charger

2 pin European type Cable with cigarette lighter plug

Solar charger

with manufacturer) External antenna Active (with 10m cable) Pole mount kit For external antenna Spare battery Standard Li-ion battery

Canvas bag

Off the shelf (please check

Bag

Standard - Optional

How to buy

The EXPLORER™ 500 is available from more than 100 Thrane & Thrane partners worldwide, covering Europe, Africa, the Middle East, Asia, North and South America. Visit www.thrane.com to select the best supplier for you.

About Thrane & Thrane

Thrane & Thrane is the world's leading manufacturer of terminals and land earth stations for global mobile satellite and radio communications. Since its incorporation in 1981, the company has established a strong position within global mobile satellite services based on the Inmarsat system, and today it provides equipment for land-based, maritime and aeronautical use. The company is listed on the Copenhagen Stock Exchange. www.thrane.com



For more details on this product, please contact Thrane & Thrane

Radio specifications

Maximum radiated power (EIRP)

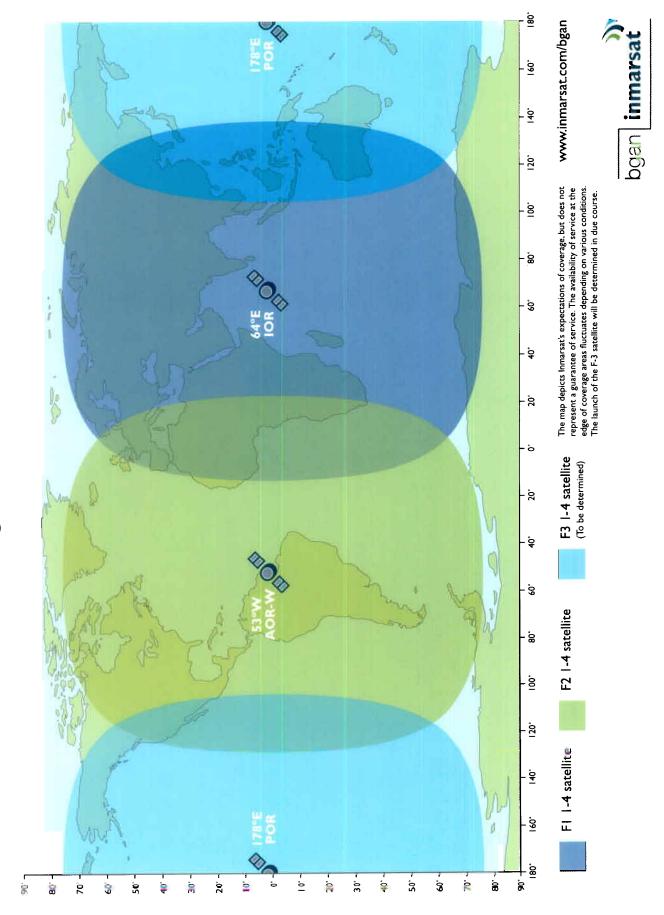
+15 IdBW +1dB

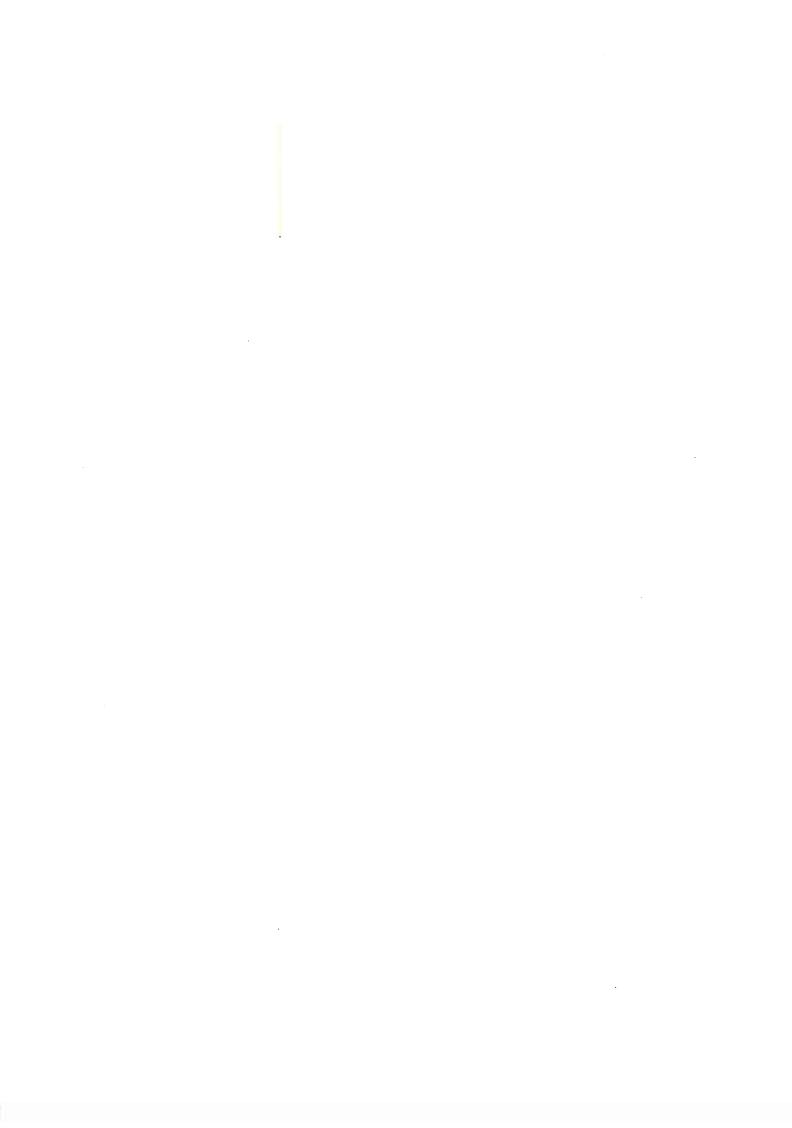
Supported operating systems

Operating system

Windows: 2000, XP MAC: OS 10.1 or later Linux: Redhat 9

Inmarsat BGAN coverage





BGAN terminals: a quick reference guide

Explorer "700 Multi-user device with extensive functionality	Thrane & Thrane www.thrane.com	290 x 399mm (3.2kgs)	Up to 492kbps (send & receive)	32, 64, 128, 256kbps (send & receive)	2 x 64kbps	Via RJ I (x2), Bluetooth handset; 3.1kHz audio	USB. Ethernet (x2), Bluetooth, WLAN 802.11g. Digital I/O	IP 52 (transceiver) IP 66 (antenna)
HNS 9201 High performance, multi-user device	Hughes Network Systems www.hns.com	345 x 275mm (2.8kgs)	Up to 492kbps (send & receive)	32, 64, 128, 256kbps (send & receive)	1 x 64kbps	Via ISDN handset	USB, Ethernet, WLAN 802,11b	IP 55
Explorer 500 High bandwidth, highly portable device	Thrane & Thrane www.thrane.com	217 x 217mm (<1.5kgs)	Up to 464 / 448kbps (receive/send)	32, 64, 128kbps (send & receive)	1 x 64kbps via USB only	Via RJ11 or Bluetooth handset; 3.1 kHz audio	USB, Bluetooth, Ethernet	IP 54
Explorer 300 Highly compact, robust device	Thrane & Thrane www.thrane.com	217 x 168mm (1.4kgs)	Up to 384 / 240kbps (receive/send)	32, 64kbps (send & receive)	Z/Z	Via RJI I or Bluetooth	Ethernet, Bluetooth	P.54
WorldPro 1000/1010 Smallest, lightest device in the range	Nera SatCom www.satcom.neraworld.com	200 x 140mm (<11g)	Up to 384 / 240kbps (receive/send)	32. 64kbps (send & receive)	NA	Via Nera WorldSet, ISDN phones, Bluetooth handset	USB (with adapter for 1010), Bluetooth, Ethernet – static IP addressing (dynamic IP addressing from Q3 2006)	IP 44
Wideye" Sabre" I Voice and data, entry-level device	Addvalue Communications www.wideye.com.sg	384 × 180mm (1.2kgs)	Up to 384 / 240kbps (receive/send)	32, 64kbps (send & receive)	NA	Via RJ11 or Bluetooth handset / headset	USB, Bluezoath, Ethernet.	IP 44
R-BGAN IP-based, entry-level device	Hughes Network Systems www.hns.com	300 × 240mm (1.6kgs)	Up to 144kbps (send & receive)	NIA	N/A	Via VolP	USB, Bluetooth, Ethernet	IP 54
	Manufacturer:	Size:	Standard IP:	Streaming IP.	ISDN:	Voice:	Data interfaces:	Ingress protection:

www.inmarsat.com/bgan

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