



GLOBAL

CONNECTIVITY

BGAN
BROADBAND GLOBAL AREA NETWORK



BGAN: TRUSTED TO CONNECT YOU ANYWHERE

Inmarsat's BGAN (Broadband Global Area Network) services provide simultaneous voice and broadband data communications anywhere on the globe from small and lightweight satellite terminals. Proven and reliable, BGAN utilises Inmarsat's L-band satellite constellation and has been enabling a broad range of use cases and industries since its launch in 2005.

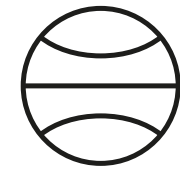
While we have continued to innovate and develop the platform in line with our customers' needs, BGAN has become the industry standard for mobile satellite connectivity, trusted by governments and businesses to deliver when other connectivity methods and other forms of satellite fail. BGAN supports up to 99.9% uptime making it ideal for business critical or safety communications, and unlike other forms of satellite will not suffer in adverse weather.

With a range of terminals, both mobile and vehicular, offering differing performance based on user need, it's easy to get started using BGAN. All you need to do is connect your BGAN terminal to a portable PC or smart device using Standard IP to access the internet for applications such as web browsing and email, or choose from a range of guaranteed Streaming IP rates to meet all your data, voice and video needs.

HOW WE WORK

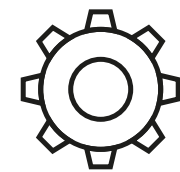
Accessing Inmarsat's award-winning connectivity is simple: either we work with you to build a bespoke solution, which we manage on an ongoing basis, or you procure hardware and airtime through our global partner network.

WHY INMARSAT?



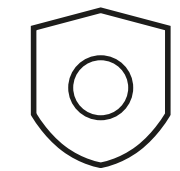
Global

Seamless global satellite network and support



Reliable

Unrivalled record operating critical safety networks for over 40 years



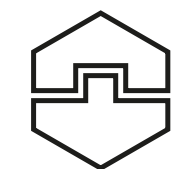
Secure

Trusted by governments to safeguard digital assets



Innovation

Continued investment to deliver advanced new capabilities



Technical expertise

Ready to support and enable your projects





THE BGAN FAMILY OF SERVICES

BGAN

Inmarsat's BGAN service provides simultaneous data and voice communications via satellite to a range of compact terminals. Delivered by our satellite network operating in the L-band, the core service achieves availability rates of 99.9 per cent and security that meets military and government standards. BGAN is capable of being used in both fixed and vehicular applications, achieving Standard IP data speeds of up to 492kbps and streaming speeds from 32bps to 800kbps (BGAN HDR).

BGAN HDR

BGAN HDR (High Data Rate) supports a portfolio of high data streaming rates. Users can expect to experience speeds of up to 800kbps, making it ideal for broadcasters, media organisations and governments looking to deliver superior video quality anywhere in the world. For even faster speeds, terminals can be bonded together, enabling connection speeds of over 1Mbps, which was previously only possible with a VSAT uplink.

BGAN PTT

Inmarsat's Push-to-Talk (PTT) service enables organisations to access real-time communications and telemetry capabilities so they can keep track of remote workers and assets wherever they are. Built on our BGAN service, with a walkie-talkie style voice component, use cases include cabin communications for rail, fleet management and remote worker vehicles.

WHY CHOOSE BGAN?

SIMULTANEOUS VOICE AND DATA

A single BGAN terminal provides simultaneous voice and broadband data up to 492kbps, enabling you to access the internet or send email, and talk on the phone at the same time.

GLOBAL COVERAGE

BGAN is available across the globe, with the exception of the extreme Polar Regions, providing connectivity wherever your business or operations take you.

RELIABLE NETWORK

BGAN services are delivered via Inmarsat's L-band network, with 99.9 per cent satellite and ground network availability and an operational lifespan into the 2030s and beyond.

SECURE

BGAN meets military and government requirements for security and supports all major VPN products and encryption standards.

EASY TO INTEGRATE

Supporting the latest IP services, as well as traditional circuit-switched voice and data, BGAN integrates seamlessly with corporate networks and legacy applications.

STREAMING IP

BGAN supports a range of guaranteed on-demand Streaming IP rates from 32kbps up to 800kbps when using BGAN HDR.

EASY TO USE

No technical expertise or training is needed to set up and use BGAN. All terminals are plug and play, so you can be online within minutes.

MOBILE OR VEHICULAR HARDWARE

Choose between mobile or vehicular BGAN options so you stay connected wherever you are.





WHERE IS BGAN MAKING A DIFFERENCE?

- **Remote workers** for office connectivity and video-conferencing
- **Enabling Aid & NGO first responders** to communicate from disaster scenes and carry out situational analysis
- **Exploration teams** for oil and gas, construction and mining sectors to stream visual data from site surveys
- **Remote offices** - portable connectivity to office systems
- **Media**
 - live video broadcasting - store and forward of video files
 - remote connectivity with HQ
- **Train operators** for telemetry, rail signalling and push-to-talk capabilities
- **Maintenance fleets** for telemetry and push-to-talk capabilities

BGAN CAPABILITIES

- Internet and intranet access
- Email and file transfer
- Video conferencing
- Live video / audio, broadcasting
- Telephone and SMS
- Push-to-talk (PTT)
- Secure VPN
- Encryption
- WAN
- VoIP and remote GSM
- Telemetry and GPS

SERVICE PLANS

Inmarsat offers a wide range of service plans that are tailored to the needs of the customer. For a full range of service plans please contact your Inmarsat Account Manager.

	BGAN SINGLE SIM PLANS	BGAN LINK	SCAP (SHARED CORPORATE ALLOWANCE)
This plan is for you if...	The BGAN Standard, Pro and Flex plans suit a wide variety of needs across the full range of industries, enabling users to get exactly what they need from the BGAN service. A prime example would be setting up a temporary office for an extended period, or users requiring higher bandwidth for applications like live broadcasting. The BGAN Standard, Pro and Flex plans are suitable for single users through to teams made up of multiple members.	If broadband data users require high monthly volumes of always-on Standard IP data for sustained periods of time. BGAN Link enables companies operating in remote regions to rapidly establish office capabilities and tools, including email, web browsing and VPN.	The regular SCAP plans are aimed at individual corporate entities buying a large number of SIMs for extended durations. These projects are often geared toward opening up new, strategic markets.
Description	These plans are made to suit your own needs with an individual price for each BGAN service component. Each plans come with a monthly subscription and allowance and we charge for the real usage per service component (e.g. background IP, streaming, voicemail, sms etc...)	The service is designed to offer a credible and competitive alternative to certain Ku-band service offerings, and provides monthly usages at compelling subscription rates. BGAN Link allows full in-BGAN Link region on existing and new plans to increase use case applicability in areas of low capacity utilisation, but important Enterprise markets. Plans include 2.5GB, 5GB, 10GB, 30GB, 60GB and 90GB monthly rates, with the option to use data on an all you can eat basis.	These plans will typically facilitate allowance sharing across a number of SIMs within a single corporate entity, reducing the risk of service waste. All applications must receive approval from Inmarsat before the package can be made available to customers or partners.
Subscription plans	There are minimum durations and billing increments applicable to all traffic types. Besides individual service prices, the service components are also available via pre-defined subscription based packages with set minimum contract terms. Options include paid and post-paid packages, depending on the plan involved. Options include paid and post-paid pack or even protection against bill shock, depending on the plan involved.	2.5, 5, 10, 30, 60 or 90GB in 1, 3 and 12 month minimum commitment available regionally.	There are minimum durations and billing increments applicable to all traffic types. Besides individual service prices, the service components are also available via pre-defined subscription based packages with set minimum contract terms. Options include paid and post-paid packages, depending on the plan involved.
Term Options	1, 3, 12, 24 and 36 months depending on the plans.	1, 3 and 12 months.	12 months.

MOBILE AND FIXED TERMINALS



SABRE RANGER 5000

Fixed terminal with Integrated antenna. C1/D2 variant available



EXPLORER 510

Ultra portable high bandwidth, easy to use



EXPLORER 540

Fixed terminal with Integrated antenna. C1/D2 variant available



EXPLORER 710

Enhanced functionality and BGAN HDR compatible



HUGHES 9211-HDR

Smallest, lightest BGAN HDR terminal



HUGHES 9202

High performance, highly compact



HUGHES 9502²

Fixed terminal with external antenna C1/D2 variant available



HUGHES 9502²

Fixed terminal with Integrated antenna C1/D2 variant available

Inmarsat's BGAN service is accessible via small, lightweight, satellite terminals, which are quick to set up and easy to use. A range of terminals are available for land, fixed and vehicular use, providing performance options to suit different operational needs. The service is accessed using the Inmarsat LaunchPad interface, which is standard across all terminals.

Portable and fixed terminals	Manufacturer	Addvalue Innovation Pte Ltd wideye.com.sg	Cobham SATCOM cobham.com/SATCOM	Cobham SATCOM cobham.com/SATCOM	Cobham SATCOM cobham.com/SATCOM	Hughes BGAN.hughes.com	Hughes BGAN.hughes.com	Hughes BGAN.hughes.com	Hughes BGAN.hughes.com
	Dimensions (W x H x D) and weight	241 x 239 x 71mm 2.5kg	202 x 202 x 52mm 1.4kg	202 x 209 x 52 1.6kg	279 x 332 x 52mm 3.5kg (inc battery Antenna: 1.9kg Transceiver: 1.6kg)	292 x 232 x 51mm 2kg	216 x 216 x 45mm 1.4kg	Terminal 200 x 150 x 45mm, 1.5kg Antenna 385 x 385 x 33mm, 1.9kg	275 x 275 x 84mm 3.8kg
	Portable / fixed	Fixed ¹	Portable and fixed ¹	Fixed ¹	Portable and fixed ¹	Portable and fixed ¹	Portable and fixed ¹	Fixed ¹	Fixed ¹
	Standard IP	Up to 448/464kbps (send / receive)	Up to 448/464kbps (send / receive)	Up to 448/464kbps (send / receive)	Up to 492kbps (send and receive)	Up to 492kbps (send and receive)	Up to 448 / 464kbps (send / receive)	Up to 448 / 464kbps (send / receive)	Up to 448 / 464kbp (send / receive)
	Streaming IP	32, 64, 128kbps	32, 64, 128kbps	32, 64, 128kbps	32, 64, 128, 176, 256kbps BGAN X-Stream, BGAN HDR	32, 64, 128, BGAN X-Stream, BGAN HDR ³	32, 64, 128kbps	32, 64, 128kbps	32, 64, 128kbps
	Voice and fax	N/A	Via WiFi or SIP (EXPLORER Connect App)	N/A	Via RJ-11, 3.1kHz audio or IP handset	Via RJ-11 (x2) for voice	Via RJ-11 (x2) for voice	N/A	N/A
	ISDN	N/A	N/A	N/A	64kbps via RJ-45	N/A	64kbps via RJ-45	N/A	N/A
	Other data interfaces	Ethernet, USB, GPIO, RS232	WiFi, USB	Ethernet, USB, GPIO	2 x Ethernet, USB, WiFi	RJ-45 Ethernet, WiFi	Ethernet, WiFi	Ethernet, USB	Ethernet, USB
Ingress protection	IP 66	IP 66	IP 66	IP 52 (transceiver) IP 66 (antenna)	IP 65	IP 55	IP 65 (antenna) IP 40 (modem)	IP 66	

¹ These terminals can be used to access BGAN Link, Inmarsat's fixed broadband data service for long-term use

² These terminals have been optimised for machine-to-machine connectivity

³ Asymmetric BGAN HDR streaming rates only

VEHICULAR TERMINALS

A wide range of vehicular BGAN terminals are also available, providing reliable connectivity on the move. Whether users require push-to-talk, multi-user or wireless capabilities, there is a robust, high performance terminal to suit individual needs.



EXPLORER® 323

Integrated Auto-tracking antenna with no moving parts



EXPLORER® 325

Compact, lightweight, robust system



HUGHES 9450-C11

Highly compact, high performance system



EXPLORER® 727

Multi-user device with extensive functionality



HUGHES 9410

Fully Integrated Land Mobile C11 Satellite Terminal with Ethernet and WLAN interfaces.

Portable and fixed terminals	Manufacturer	Cobham SATCOM cobham.com/SATCOM	Cobham SATCOM cobham.com/SATCOM	Hughes BGAN.hughes.com	Cobham SATCOM cobham.com/SATCOM	Hughes BGAN.hughes.com
	Dimensions (W x H x D) and weight	Integrated Antenna/ Terminal 97 x Ø321 mm, 3.6kg	Terminal 231 x 278 x 41mm, 2.4kg Antenna 349 x 128mm, 3.6kg	Terminal 234 x 281 x 46mm, 2.3kg Antenna 252 x 119mm, 2kg	Terminal 247 x 270 x 43mm, 2.5kg Antenna 477 x 160mm, 6kg	252mm x 150mm, 3.0kg
	Standard IP	Up to 384 / 225 kbps (>20° elevation) Up to 270 / 158 kbps (>5° elevation)	Up to 448 / 464kbps (send / receive)	Up to 448 / 464kbps (send / receive)	Up to 492kbps (send and receive)	Up to 464 kbps shared data rate
	Streaming IP	32, 64 kbps	32, 64, 128kbps	32, 64, 128kbps	32, 64, 128, 256kbps ¹ BGAN X-Stream™ on-the-pause	32, 64, 128 kbps
	Voice and fax	4 kbps (AMBE+2) via SIP	1 RJ-11 port for voice	Via RJ-45 ISDN handset, via ISDN TA with two RJ-11 ports for voice or 3.1kHz for audio / fax	2 RJ-11 ports for voice and 3.1kHz audio / fax	N/A
	ISDN	N/A	N/A	56 / 64kbps ²	56 / 64kbps ³	N/A
	Other data interfaces	1x Ethernet, WiFi	2 x Ethernet	4 x PoE Ethernet, WiFi with extended standard connector	4 x Ethernet, USB	Ethernet, WLAN
	Ingress protection	IP 66	IP 31 (terminal) IP 56 (antenna)	IP 40 (terminal) IP 56 (antenna)	IP 31 (terminal) IP 56 (antenna)	IP 56

¹ Inmarsat supports 256kbps streaming at elevations above 45 degrees. Below this elevation, the 128kbps streaming connection is recommended

² Depending on location. Inmarsat supports ISDN at elevations above 45 degrees

³ Depending on location. Inmarsat supports ISDN at elevations above 20 degrees

OUR CONNECTIVITY SERVICES



LAND XPRESS



BGAN



BGAN M2M



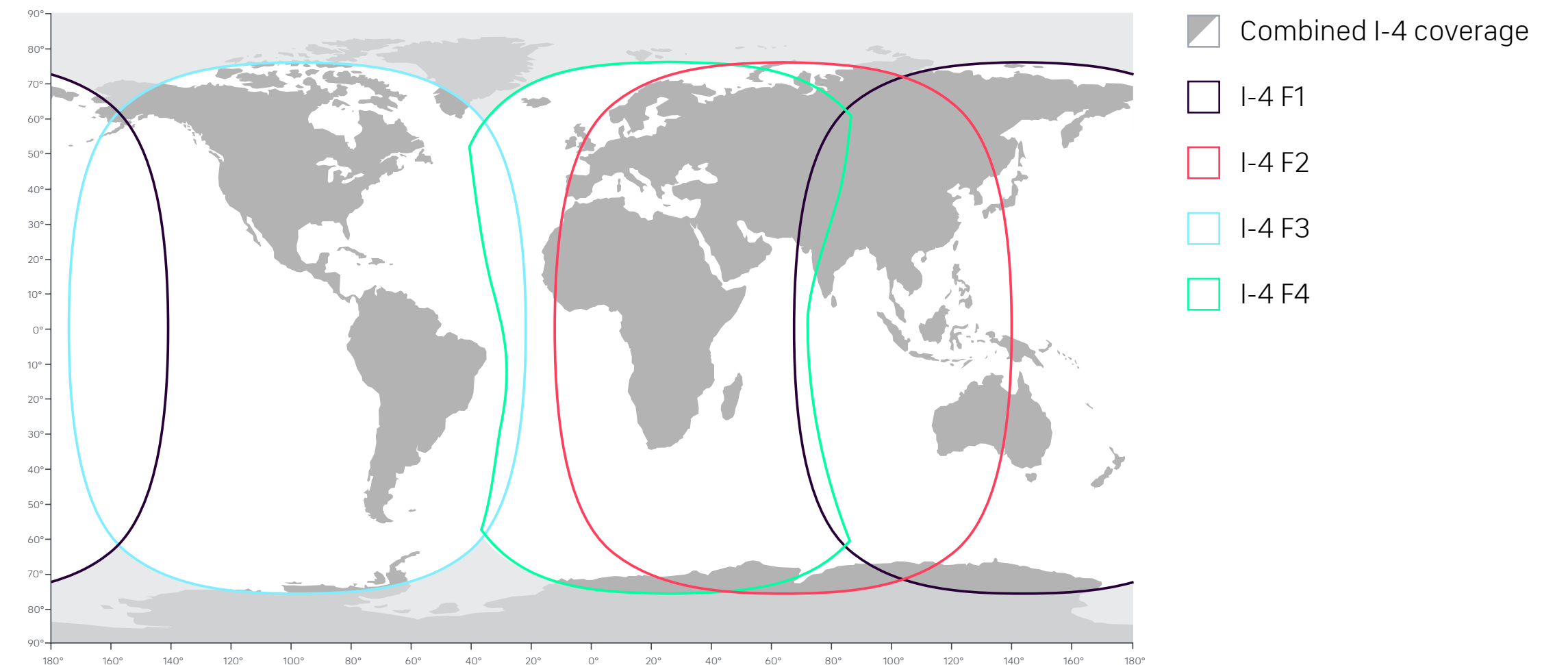
ISATDATA PRO



ISATPHONE 2

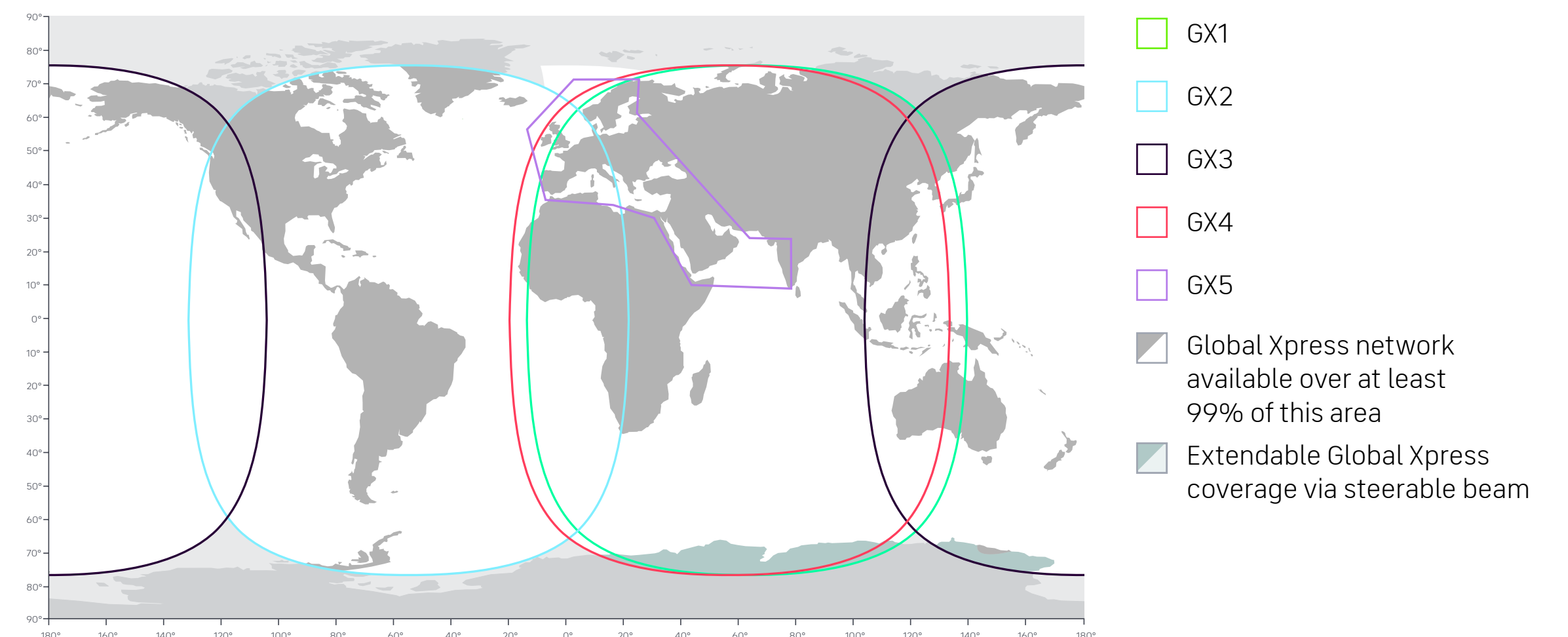
Ka-band	L-band	L-band	L-band	L-band
Up to 16 Mbps receive, 4 Mbps send	492kbps Up to 800kbps with BGAN HDR Standard IP & Streaming IP	Up to 448 / 464kbps (send / receive)	6,400 / 10,000 bytes (send / receive)	2.4kbps voice codec
VoIP, video conferencing, VPN access, email live video and audio streaming, high-speed broadband for internet access, high-speed file transfer, video surveillance	Email, internet access, Video conferencing, video transfer, voice, file transfer, IP SCADA, data backhaul, telemetry	IP and non- IP SCADA, secure ATM/POS solutions, automation, remote fixed asset monitoring, including telemetry and surveillance, IoT	Asset tracking, fleet management, industrial automation, remote monitoring and control, workflow automation, in-cab dispatch and messaging, IoT and cellular hybrid capabilities	Voice, SMS, short-message email, tracking and emergency assistance

L-BAND I-4 COVERAGE



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KA-BAND I-5 COVERAGE



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ABOUT ENTERPRISE

Inmarsat Enterprise is enabling safer, more efficient, more sustainable operations wherever businesses operate on land. Our customers trust us to deliver the industry standard in reliable mobile satellite connectivity, underpinning mission critical communications, remote operations, machine-to-machine (M2M) applications and the Industrial Internet of Things (IoT). With expertise in agriculture, aid and NGO, media, mining, oil and gas, renewables, transport and utilities we work with our partners to build solutions that deliver transformational outcomes and ensure the right level of ongoing management.

ABOUT INMARSAT

Inmarsat is the leading provider of global mobile satellite communications services. Since 1979, Inmarsat has been providing reliable voice and high-speed data communications to governments, enterprises and other organisations, with a range of services that can be used on land, at sea or in the air. Inmarsat operates around the world, with a presence in the major ports and centres of commerce on every continent. For more information, please visit www.inmarsat.com

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