Viasat

GX Aviation

G2X **Aero**

Built for Government

Global Xpress (GX) is the world's first and only globally available, high-speed broadband network, owned and managed by a single operator.

The G2X Aero satcom as a service model provides government Aviation customers with seamless, wordwide, multi-mbps services. Just like our long trusted BGAN service, G2X Aero is easy to use, with centralised, portal based configuration and over the air management ensuring operator training is minimised and operational flexibility is maximised. G2X Aero follows you wherever you go, there's no need to warn your satellite operator in advance.

Benefits

- This is Satellite capability as a Service with access on demand
- Service models to suit your operation, with user selected Committed and Maximum Information Rates (CIR/MIR) and contract periods from Occasional Use through to long term subscriptions
- Ease of operation
- Over The Air terminal configuration - attach to the network in minutes with no in-field configuration or files to upload
- High speed Internet / IP network connectivity and file / data transfer
- Cyber security best practices
- Terminals available to provide interoperability with Military Ka-band systems
- A range of terminal manufacturer partners to suit your application, environment and budget
- Remote support through our 24x7Network Operations Centre

WHY **GOVERNMENTS** TRUST **GX**

A Satcom service on demand, designed for mobility.

Reliable

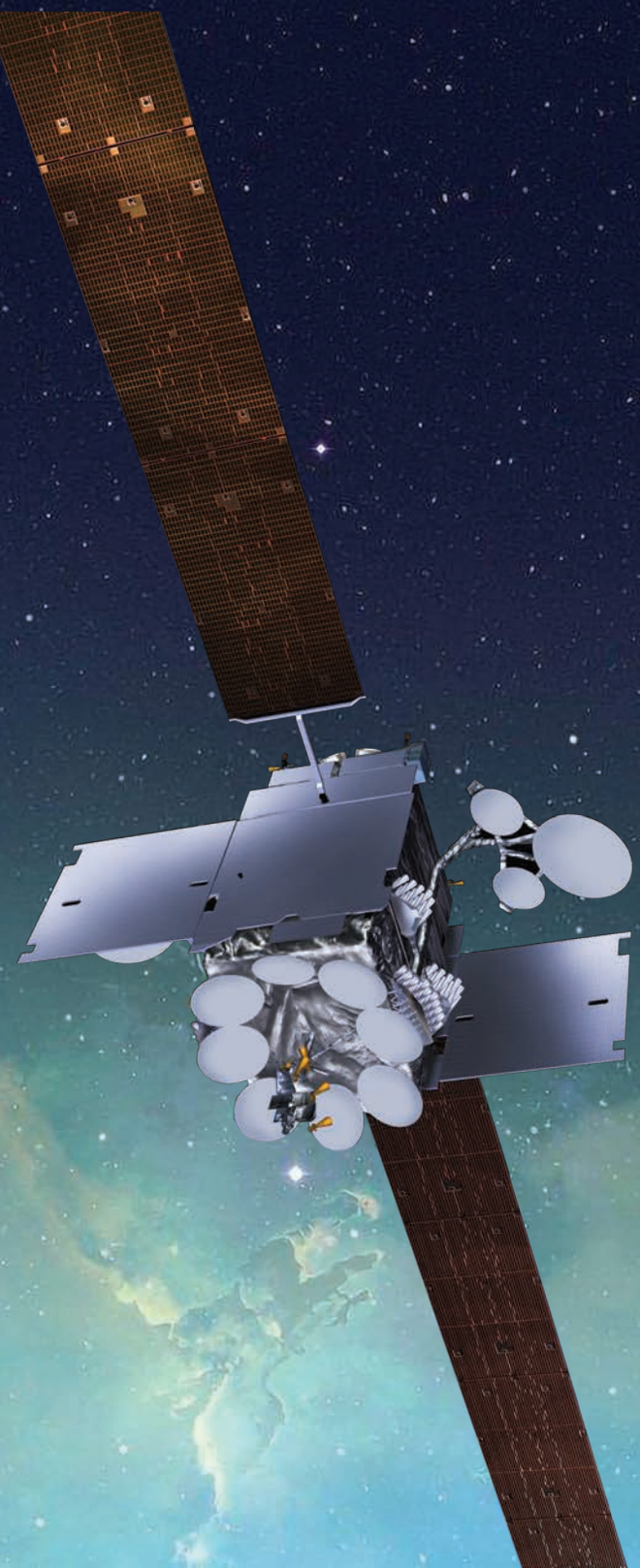
- Multiple satellites provide in-orbit diversity
- Global Ka-band network with additional satellites in build - all on one subscription
- Viasat quality standards, end-to-end
- Cyber security best practices
- Fully secure, diverse and dual-redundant ground network accessible from three regional Meet-Me Points

Affordable

- A global satcom system for the cost of single terminal subscription
- State of the art terminals to suit a range of use cases and budgets
- Reduced training requirements saves money on end user training and support costs
- Flexible pricing models to suit your CONOPs

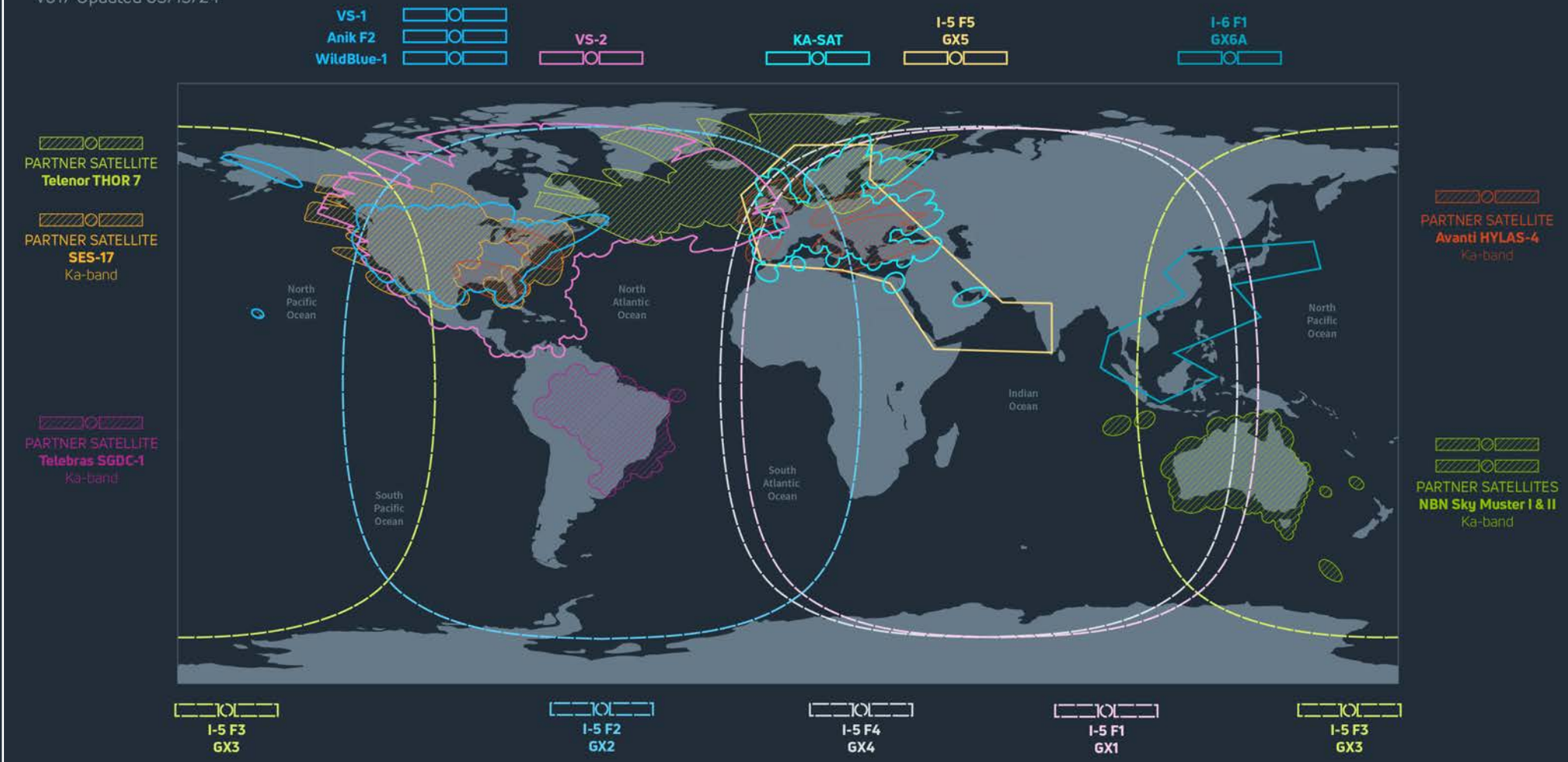
High Performance

- Smaller, state of the art user terminals providing access to Global Xpress, military Ka-band and alternative networks from a single device
- Global access to multi-Mbps services



Viasat **current Ka-band coverage**

v017 Updated 03/13/24



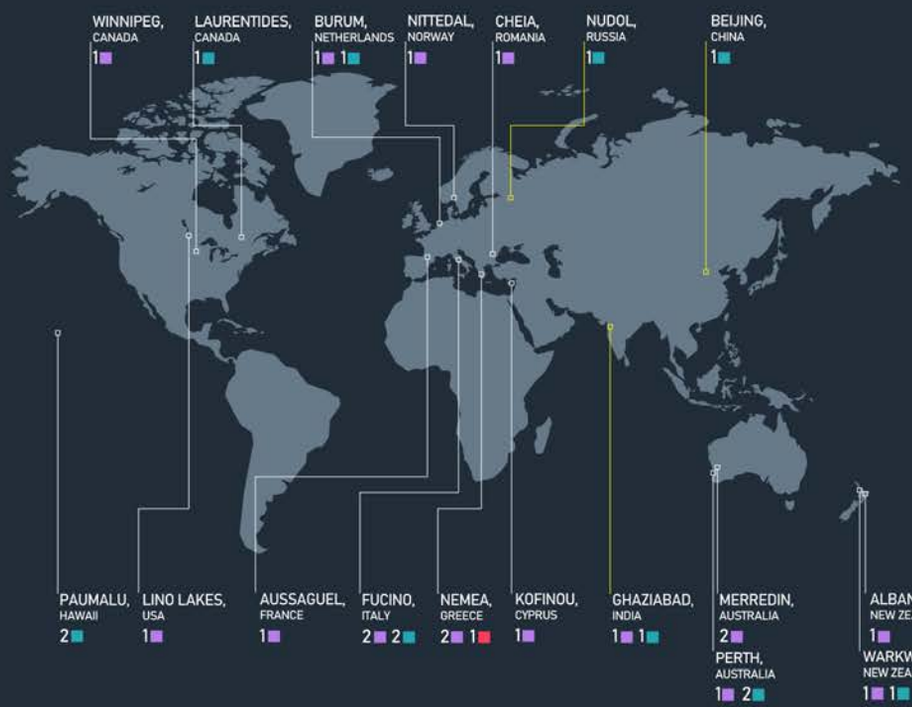
For illustrative purposes only. Coverage is approximate and subject to change. Not representative of any single product or service.

Fully managed network service with ease of use at the heart of the design

SATELLITE ACCESS STATION ANTENNAS

- L-band SAS
- Global Xpress SAS**
- S-band SAS
- Independant national network

**Global Xpress also makes use of partner networks in various regions.

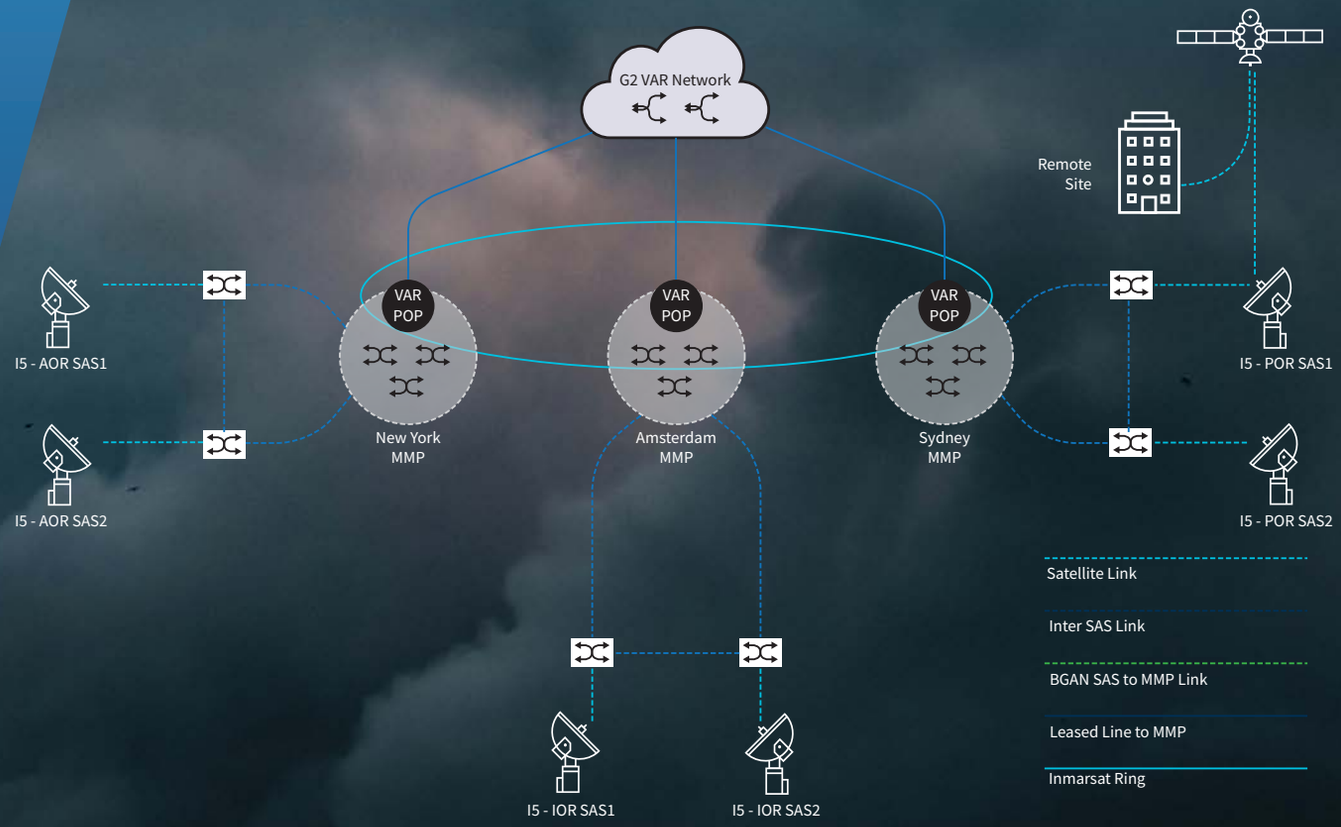


A secure, redundant ground infrastructure with a single access point

THE **VALUE** OF GX

Communications certainty in an uncertain world

Whether you operate locally or globally, with Global Xpress there is no longer a need to manage multiple legacy service contracts, multiple SLAs and a range of VSAT standards. The value of GX is the ability to leverage the same technology wherever and whenever you need high speed data services. Flexibility. Mobility. Certainty.

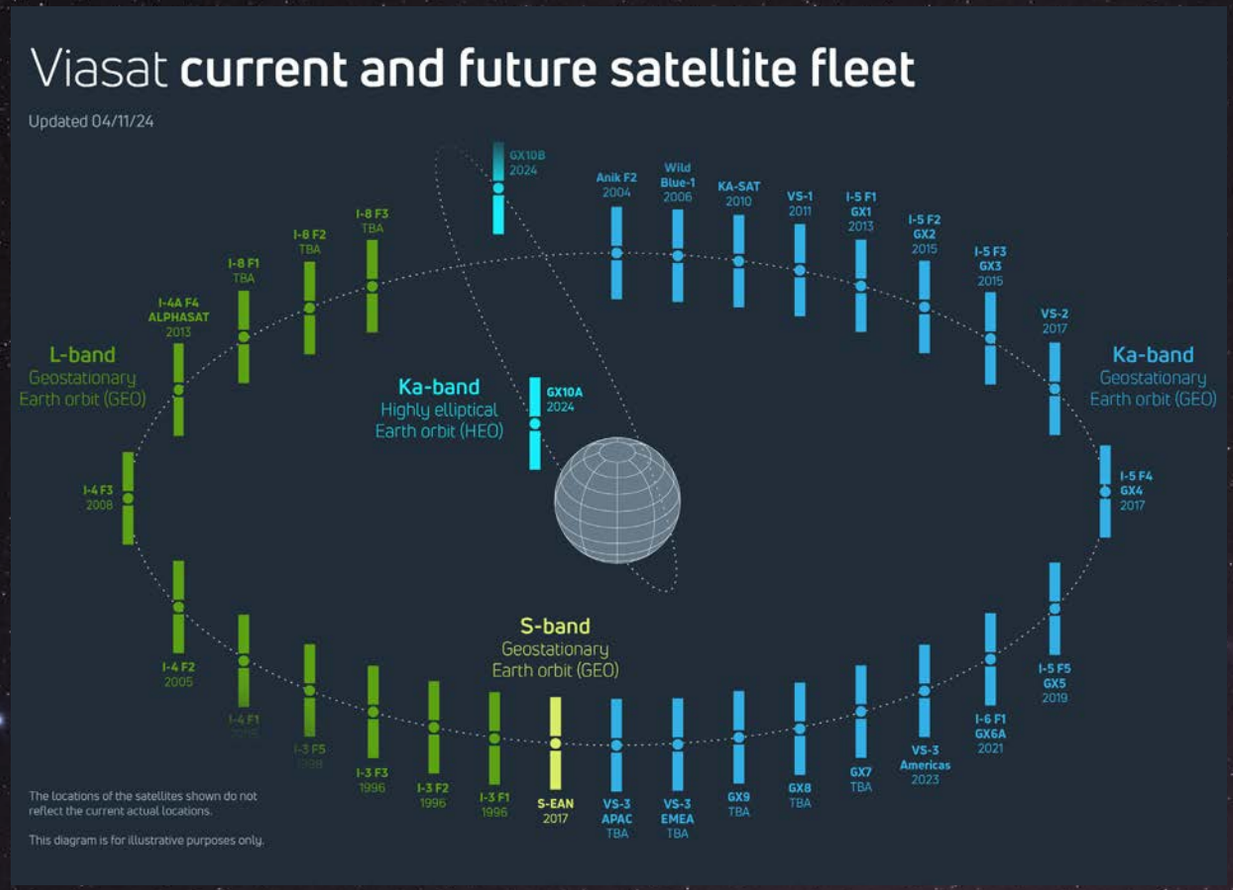


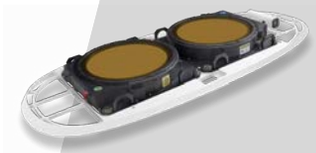
6 GX SATELLITES IN ORBIT AND 7 MORE IN **BUILD**

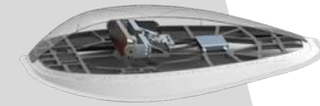
This next generation of GX satellites (GX7, GX8 and GX9) are expected to provide the first software-defined constellation for global mobile connectivity. Each satellite is designed to deliver twice the total capacity of the entire current GX network, simultaneously generating thousands of independent spot beams to meet user demands across the globe in real time.

Our first non-GEO satellites (GX10A/B) are allocated to cover the North Pole, ensuring continuous coverage above 65° North.

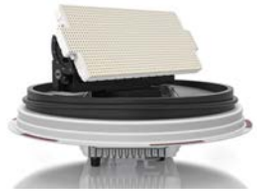
GX6A/B is anticipated to enhance and assure the future of our BGAN L-band service for more than 15 years as well as providing additional GX payloads.

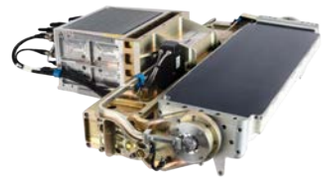


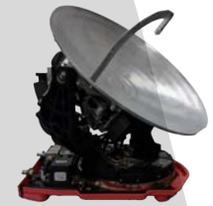




		Orbit GX30	Orbit GX46	Thinkom 2517	Thales MRTT
Antenna	Aircraft Fitout Configuration 1 - G-MODMAN as primary modem				
Main Modem Combo		GMM2+OP or a GMM3 variant	GMM2+OP or a GMM3 variant	GMM2+OP or a GMM3 variant	GMM2
Description		Ka-band, 30cm parabolic antenna.	Ka-band, 46cm parabolic antenna.	Ka-band, FMA, electronic steerable array.	Ka-band, FMA, electronic steerable array.
G-Max		Yes	Yes	Yes	Yes
K-Max		Yes (Ka only)	Yes (Ka only)	Yes (Ka only)	No
VS-3		No (VS-3)	No (VS-3)	No (VS-3)	No (VS-3)
GX type approval		Yes	Yes	No	No
Terminal efficiency group		1A	1A, 2A	1A, 2A	1A, 2A
Modem Type		G-MODMAN 1RU and ARINC enclosures	G-MODMAN 1RU and ARINC enclosures	G-MODMAN 1RU and ARINC enclosures	G-MODMAN 1RU and ARINC enclosures
Form Factor		307mm x 328mm (W x H)	500mm x 490mm (W x H)	1422mm x 813mm (W x H)	Awaiting Thales confirmation
BLOCK UPCONVERTER (BUC)		56dBW EIRP typical	56dBW EIRP typical	55.5 dBW EIRP(Psat)	50dBW EIRP typical
RF BANDS		Com Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)	Com Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)	Com Ka (Rx 17.7-20.2GHz, Tx 27.5 -30GHz)	Com Ka (Rx 17.7-20.2GHz, Tx 27.5 -30GHz)
Terminal pointing		Auto Acquire Tracking	Auto Acquire Tracking	Auto Acquire Tracking	Auto Acquire Tracking
Power Source		+28VDC	+28VDC 275W	+28VDC 275W	+28VDC
Management User Interface		Yes	Yes	Yes	Yes
Equipment Interface		Multi Ethernet data; ARINC 429 from aircraft navigation bus	Multi Ethernet data; ARINC 429 from aircraft navigation bus	Multi Ethernet data; ARINC 429 from aircraft navigation bus	Multi Ethernet data; ARINC 429 from aircraft navigation bus
Weight		Antenna: 10kg (22lbs); KPSU 5kg (11lbs)	Antenna: 14.25kg (31.5lbs); KPSU 5kg (11lbs)	Antenna: 47kg (104lbs); KRFU 7.3kg (16lbs); KANDU 7.7kg (17lbs)	Awaiting Thales confirmation







Antenna	GetSAT Milli-EX	JetWave MCX	Aircraft Fitout Configuration 2 – MBR as primary modem	KuKarray 2	G18L
Main Modem Combo	GMM2+OP or a GMM3 variant	Honeywell MODMAN		MBR-5502 + GMM2	MBR-5502 + GMM2
Description	Ka-band, FMA, electronic steerable array.	Ka-band, FMA array		Dual band (Ku/Ka) FMA. mechanical steerable array.	Ka-band, 46cm parabolic antenna.
G-Max	Yes	Yes		Yes	Yes
K-Max	Yes(Ka only)	No		Yes (Ka only)	Yes (Ka only)
VS-3	No (VS-3)	No (VS-3)		Yes (VS-3)	Yes (VS-3)
GX type approval	No	Yes		No	No
Terminal efficiency group	1A, 2A	1A, 2A		1A, 2A	1A, 2A
Modem Type	G-MODMAN 1RU and ARINC enclosures	ARINC enclosures		ARINC enclosures	ARINC enclosures
Form Factor	650mm x 380mm (W xH)	Antenna 35.72” swept volume x 9.3” high		997mm x 287m (W x H)	498mm x 498m (W x H)
Block Upconverter (BUC)	48.5dBW EIRP typical	48.6dBW EIRP typical		997mm x 287m (W x H)	498mm x 498m (W x H)
RF BANDS	Com Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)	Com Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)		Ku (Rx 10.95-12.75GHz, Tx 14.0 - 14.5 GHz) Com Ka (Rx 17.7-20.2GHz, Tx 27.5-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)	Com Ka (Rx 17.7-20.2GHz, Tx 27.5-30GHz) & MIL-Ka (RX x 20.2-21.2GHz, Tx 30-31GHz)
Terminal pointing	Auto Acquire Tracking	Auto Acquire Tracking		Auto Acquire Tracking	Auto Acquire Tracking
Power Source	+28VDC	+28VDC		115 VAC, 360 Hz – 800 Hz single phase, or 28 VDC	115 VAC, 360 Hz – 800 Hz single phase, or 28 VDC
Management User Interface	Yes	Yes		Yes	Yes
Equipment Interface	Multi Ethernet data; ARINC 429 from aircraft navigation bus	Multi Ethernet data; ARINC 429 from aircraft navigation bus		Multi Ethernet data; ARINC 429 from aircraft navigation bus	Multi Ethernet data; ARINC 429 from aircraft navigation bus
Weight	22kg including radome and hatch mount	Antenna = 88lbs; Modem manager = 14lbs; APM = 0.75lbs: BUC = 11.5Lbs: KANDU = 8.8lbs		Antenna = 88lbs; Modem manager = 14lbs; APM = 0.75lbs: BUC = 11.5Lbs: KANDU = 8.8lbs	Antenna = 88lbs; Modem manager = 14lbs; APM = 0.75lbs: BUC = 11.5Lbs: KANDU = 8.8lbs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