

Falcon In-Flight Seamless Connectivity

MARKET OVERVIEW AND FALCON SOLUTIONS FOR IN-SERVICE – AFTERMARKET RETROFIT

DASSAULT AVIATION

WELCOME TO
FALCON CONNECTIVITY BROCHURE



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LANDSCAPE

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& COMPARISON



1 IN-FLIGHT CONNECTIVITY LANDSCAPE

FALCON **CONNECTIVITY**



IN-FLIGHT CONNECTIVITY CRITERIA

Bandwidth (speed)
Theoretical maximum capacity of a communication link, measured in bits per second (bps), representing the total volume of data that could be transferred per unit of time

Satellite Network type
Classification of a communication system based on the orbital altitude of its satellites, primarily divided into Low Earth Orbit (LEO), Medium Earth Orbit (MEO), and Geostationary Earth Orbit (GEO)

Throughput
Actual amount of data successfully transmitted and received over that link in a given time, which is usually lower than bandwidth due to real-world factors like network congestion and packet loss

Latency
Latency is the time delay, typically measured in milliseconds (ms), for a single data packet to travel from its source to its destination, affecting the responsiveness of the connection

FALCON **CONNECTIVITY**



AIRCRAFT CONNECTIVITY NEEDS

[1] Cockpit / Operations

- Safety services
- Apps connectivity needs :
  EFB, FalconSphere, Datalink & CPDLC

[2] Cabin

- Low speed Email, text messaging
- High Speed Audio and video streaming, conf call, social media, internet browsing

[3] Maintenance

- Aircraft increasingly connected
- Growing volume of data (engines, aircraft downloads - databases and system updates, FalconBroadcast for troubleshooting live to the ground support

FALCON **CONNECTIVITY**



IN-FLIGHT CONNECTIVITY SOURCES

Internet can be accessed through various primary systems:

- Air-To-Ground (ATG), which uses ground based cellular towers
- Wi-Fi
- Cellular network (3G/4G)
- Satellite-based

IN-FLIGHT CONNECTIVITY PASSENGERS NEEDS

Stay connected
Worldwide coverage

Quality of service
- Home-like experience
- Reliable and secure solution

Service solution
- All-in-one solution or independent pipes
- Flexible plans
- One-bill solution (FalconConnect)

Technical support
- Anywhere, anytime
- Internet failure considered as AOG



CONNECTIVITY NETWORK TYPES



Strengths
- Proven reliable connection
- Few gateways
- Aircraft congestion management (committed throughput)

Weaknesses
- Complex directional aircraft antennas
- Polar coverage depending on satellite network

Latency : < 1 sec

Ex. Systems: Honeywell Jetwave 1, Jetwave X, Gogo PSKu, PSKa, Viasat Ka

Strengths
- Global coverage incl. polar regions
- Low latency < 200 ms

Weaknesses
Potential risks of disconnections on some constellations (gateways)

Ex. Systems: Honeywell Aspire 350, SpaceX Starlink, Gogo Galileo HDX

Strengths
Reduced cost but increasingly challenged by new LEO/GEO providers prices

Weaknesses
- Limited to flying over land
- Only limited to North America

Ex. Systems: Gogo AVANCE L5

FALCON **CONNECTIVITY**

CONNECTIVITY NETWORK SYSTEMS



Honeywell Jetwave 1 (service Viasat Ka)
40 Mb/s

Honeywell Jetwave X (service Viasat Ka)
100 Mb/s (2026), 220Mb/s (2027)

Gogo PSKa (service Viasat Ka)
100 Mb/s (in some regions) 40 Mb/s (globally)

Gogo PSKu (service Intelsat)
50 Mb/s

Viasat Ka (service Viasat Ka)
150 Mb/s

Luxstream Ku (not on Falcons)
15 Mb/s

Gogo DLU (service Iridium Legacy)
CPDLC only

Honeywell Aspire 350 (service Iridium Legacy + Iridium NEXT)
704 kbp/s

Gogo Galileo HDX (service Eutelsat OneWeb)
55 Mb/s via small HDX antenna

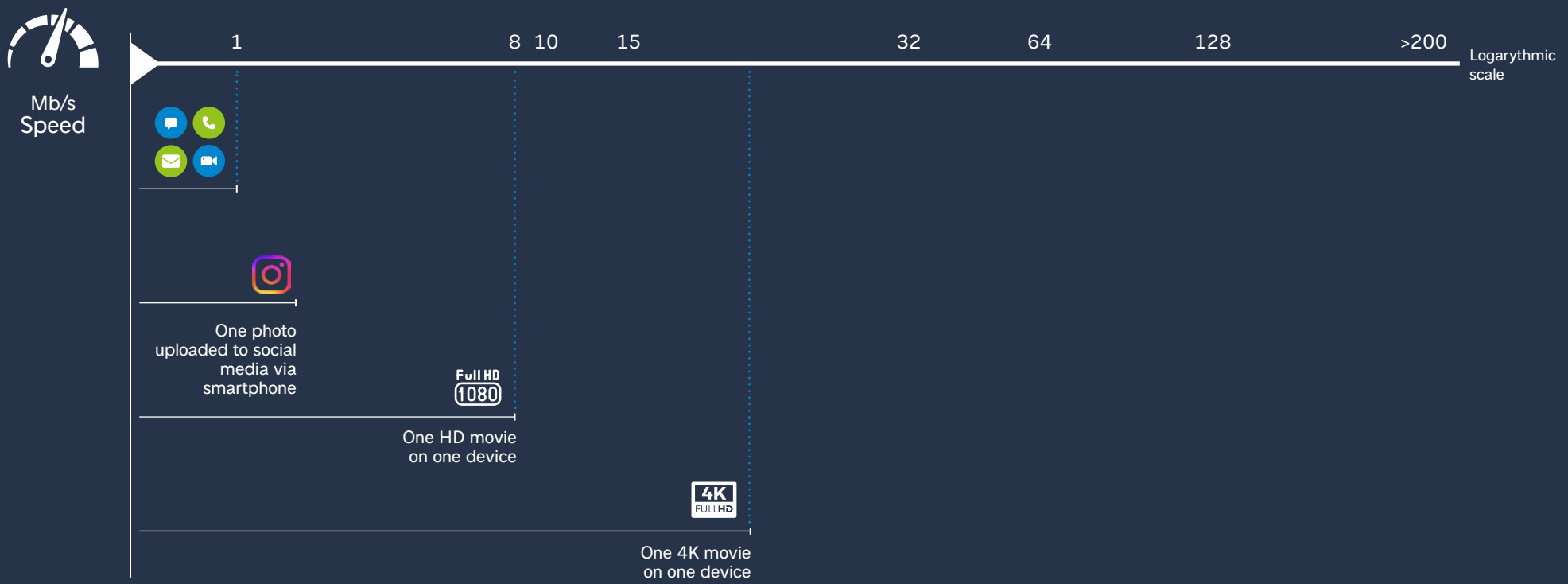
SpaceX Starlink (service Starlink)
8,000+ Ku-band Satellites
450 Mb/s

Gogo AVANCE L5 (service Gogo Biz 4G)
9 Mb/s

Gogo AVANCE LX5 (service Gogo biz 5G)
80 Mb/s (2026)
In development

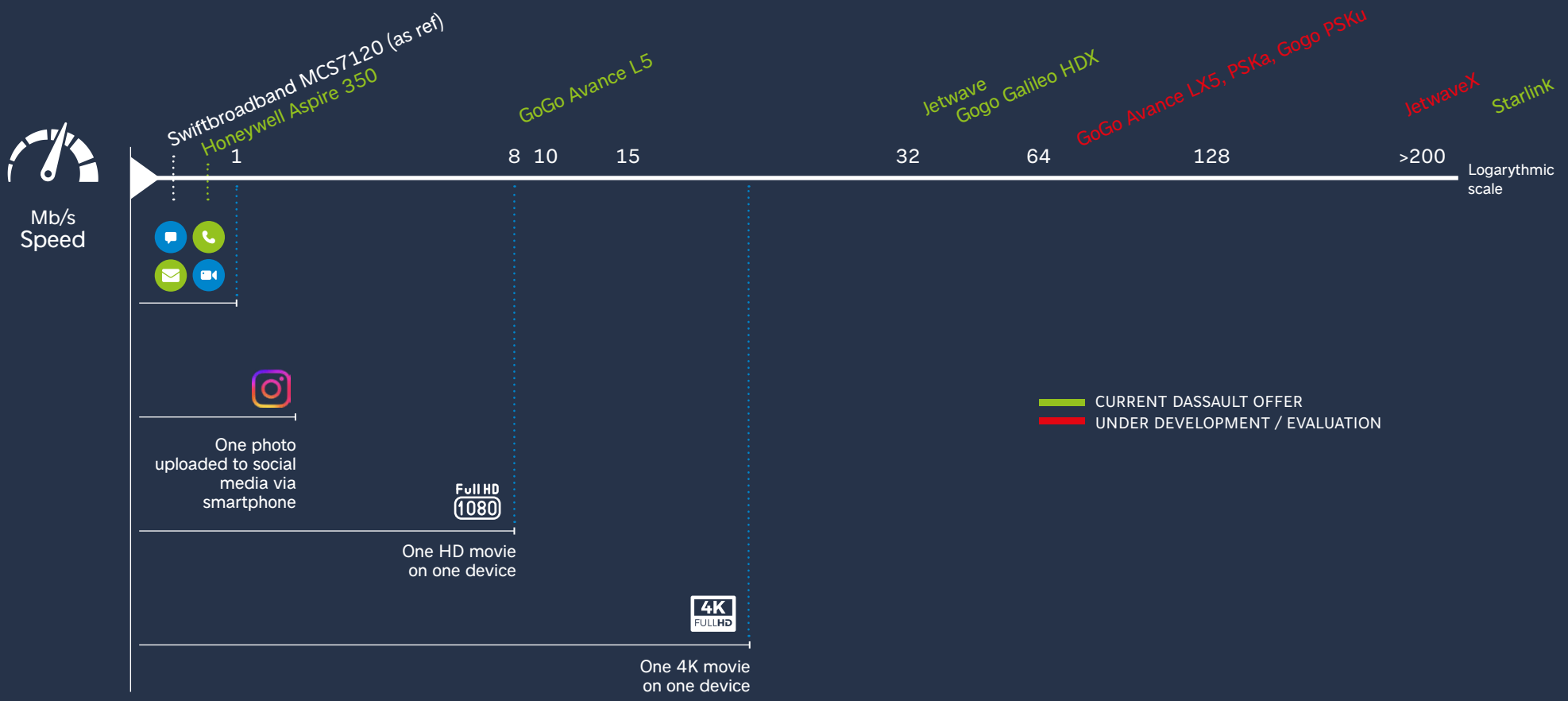
INTERNET SPEED NEEDS

12.5 Mb/s covers 95% of passenger needs*



* Source: survey providers 2024

CONNECTIVITY PROVIDES MORE THAN SPEED





2 FALCON CONNECTIVITY SOLUTIONS

Dassault equips its aircraft with premium connectivity options, like Ka-band, Iridium Next, and continuously works on future systems (JetwaveX, Starlink…) for high-speed, reliable internet access anywhere in the world.

CURRENT OFFER – AFTERMARKET RETROFIT

SYSTEMS	SERVICE TYPE	SPEED (DOWN/UP)	AVAILABILITY
Gogo DLU	Iridium Cockpit	CPDLC	Aftermarket
Honeywell Aspire 350	Iridium in Cockpit & Low Speed internet cabin	700 kb/s / 350 kb/s	Linefit + Aftermarket
Gogo AVANCE L5	High Speed internet cabin	9 Mb/s / 3 Mb/s	Linefit + Aftermarket
Honeywell Jetwave 1	High Speed internet cabin	40 Mb/s / 3 Mb/s	Linefit + Aftermarket
Gogo PSKu	High Speed internet cabin	50 Mb/s / 3 Mb/s	Aftermarket
Gogo PSKa	High Speed internet cabin	100 Mb/s / 3 Mb/s	Aftermarket
Viasat Ka	High Speed internet cabin	150 Mb/s / 10 Mb/s	Aftermarket
SpaceX Starlink	High Speed internet cabin	450 Mb/s / 25 Mb/s	2027 Linefit + Aftermarket
Gogo Galileo HDX	High Speed internet cabin	55 Mb/s / 7 Mb/s	Aftermarket
Honeywell Jetwave X	High Speed internet cabin	220 Mb/s / 10 Mb/s	Linefit + Aftermarket
Gogo AVANCE LX5	High Speed internet cabin	80 Mb/s / 5 Mb/s	Aftermarket

CURRENT DASSAULT OFFER
UNDER DEVELOPMENT / EVALUATION

CERT – 2026 AFTERMARKET RETROFIT AVAILABILITY

	Gogo	Gogo	Honeywell	Honeywell	Honeywell	Gogo	Gogo	Viasat	SpaceX	Gogo	Gogo
	DLU	SDR-G	Aspire 350 Iridium	Jetwave 1	Jetwave X	PSKu	PSKa	Ka	Starlink	Galileo HDX	AVANCE L5
	Cockpit CPDLC	Cabin Voice	Cockpit : Voice & safety data	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed
Falcon 900EX				✓				✓	✓		✓
Falcon 2000EX									✓		✓
Falcon 2000EX EASy	✓								✓	✓	✓
Falcon 2000LX/S/ LXS	✓		*	✓	*	✓			✓	✓	✓
Falcon 900EX EASy/LX	✓			✓		✓		✓	✓	✓	✓
Falcon 7X/8X	✓	✓	*	✓	*	✓	✓	✓	✓	✓	✓
Falcon 6X			✓	✓	*				*		✓

*Under development

CERT – 2026 AFTERMARKET RETROFIT AVAILABILITY

	Gogo	Gogo	Honeywell	Honeywell	Honeywell	Gogo	Gogo	Viasat	SpaceX	Gogo	Gogo
	DLU	SDR-G	Aspire 350 Iridium	Jetwave 1	Jetwave X	PSKu	PSKa	Ka	Starlink	Galileo HDX	AVANCE L5
	Cockpit CPDLC	Cabin Voice	Cockpit : Voice & safety data	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed	Cabin / high Speed
Falcon 900EX				ST03604NY					SB-621 / S061		SB-S012
Falcon 2000EX									SB-515		SB-S012
Falcon 2000EX EASy	SB-S015								SB-515 / S061	SB-502 / S062	SB-S012
Falcon 2000LX/S/ LXS	SB-S015		SB-523	SB-437 / S017	*	SB-502 / S040			SB-515 / S061	SB-502 / S062	SB-S012
Falcon 900EX EASy/LX	SB-S015		*	SB-554 / 565		SB-613 / S040		ST03614NY	SB-621 / S061*	SB-613 / S062*	SB-S012
Falcon 7X/8X	SB-S015	SB-528 / S048	*	SB-454 / 517	*	SB-625 for 8X / S040	SB-454 / S060	ST03609NY	SB-646 / S061	SB-625 for 8X / S062	SB-S012
Falcon 6X			M-OPT 164	M-OPT 94	*				*		M-OPT 93

*Under development

FALCON **CONNECTIVITY / FALCON CONNECT**



MANAGING IN-FLIGHT CONNECTIVITY

DASSAULT AVIATION × Honeywell

Dassault Aviation: Aircraft systems expertise & customer knowledge

Honeywell / GoDirect: Network & service provider performances

Fully Integrated Solution
The only OEM overall integrated/tested solution

Falcon Connect

ALL-IN-ONE-SOLUTION

Reliable & simple connectivity system

- Solution fully validated by Dassault Aviation, covering cockpit & cabin connectivity
- One single Wi-Fi access point in the cabin whatever the connectivity solutions installed

One single billing

- Large choice of subscription plans
- Pay-as-you-go offer

Single point of contact

Technical support & Commercial support

WW technical support

Anywhere, anytime





KEY FUNCTIONALITIES

Seamless communication

FalconTalk App operates independently of SIM cards, using the aircraft phone number

Real-time data consumption

- Using real-time data monitoring
- Internet speed test available

Activity tracking connected devices

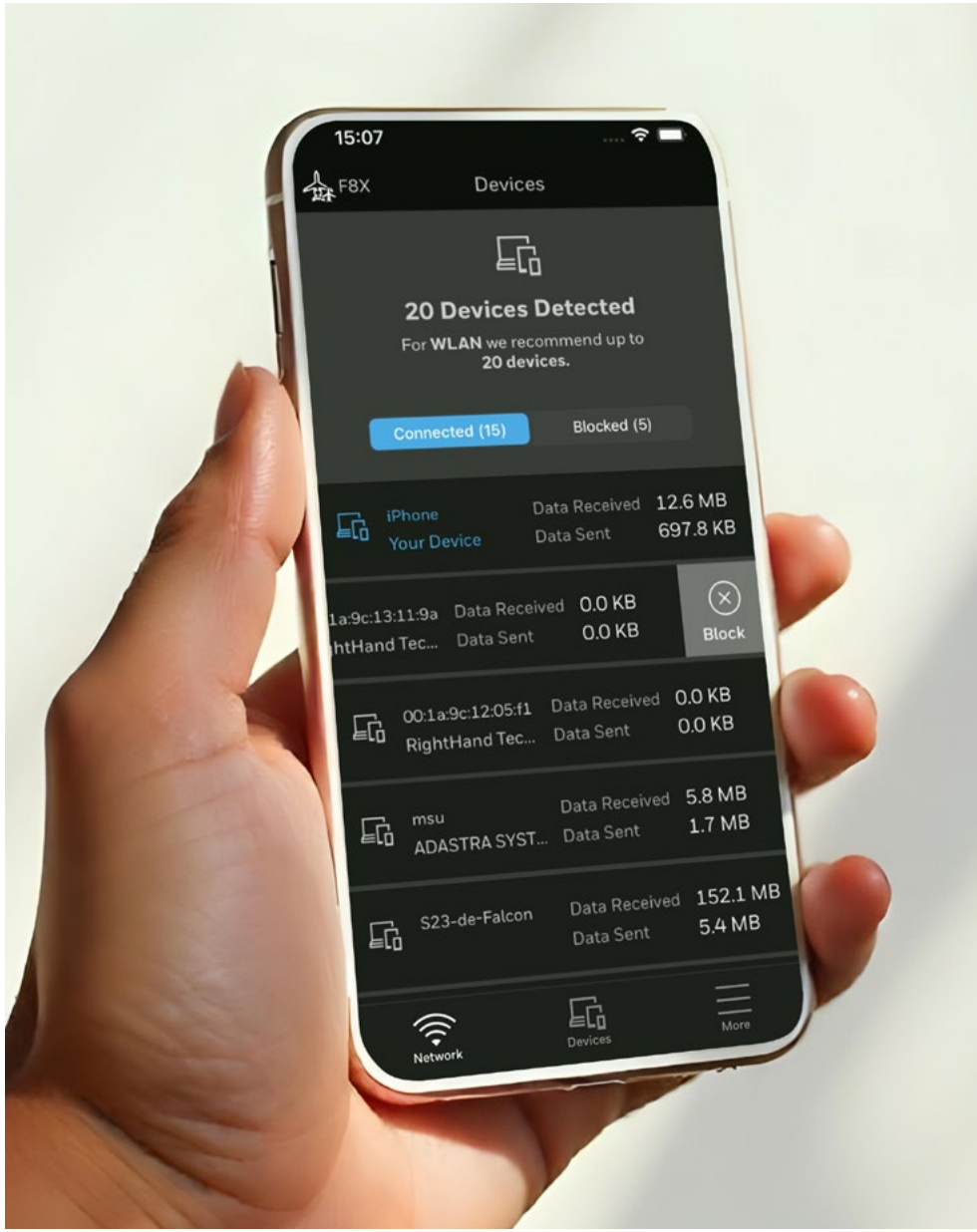
- Number of connected devices on board
- Volume of data consumed per device

Data control

- Time limitation (and avoid overages)
- Content filter
- Possibility of blocking users
- Services analysis by aircraft, fleet or subscriptions

Custom notifications

- Automatically send updates of services and subscriptions
- With real-time geographical coverage map, proactive passenger alerts when the aircraft enters or leaves a connectivity zone



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FalconTalk App operates independently of SIM cards, using the aircraft phone number

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- **Number of connected devices on board**
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3
OTHER SOLUTIONS
& COMPARISON
Falcon Connect
STARLINK
gogo

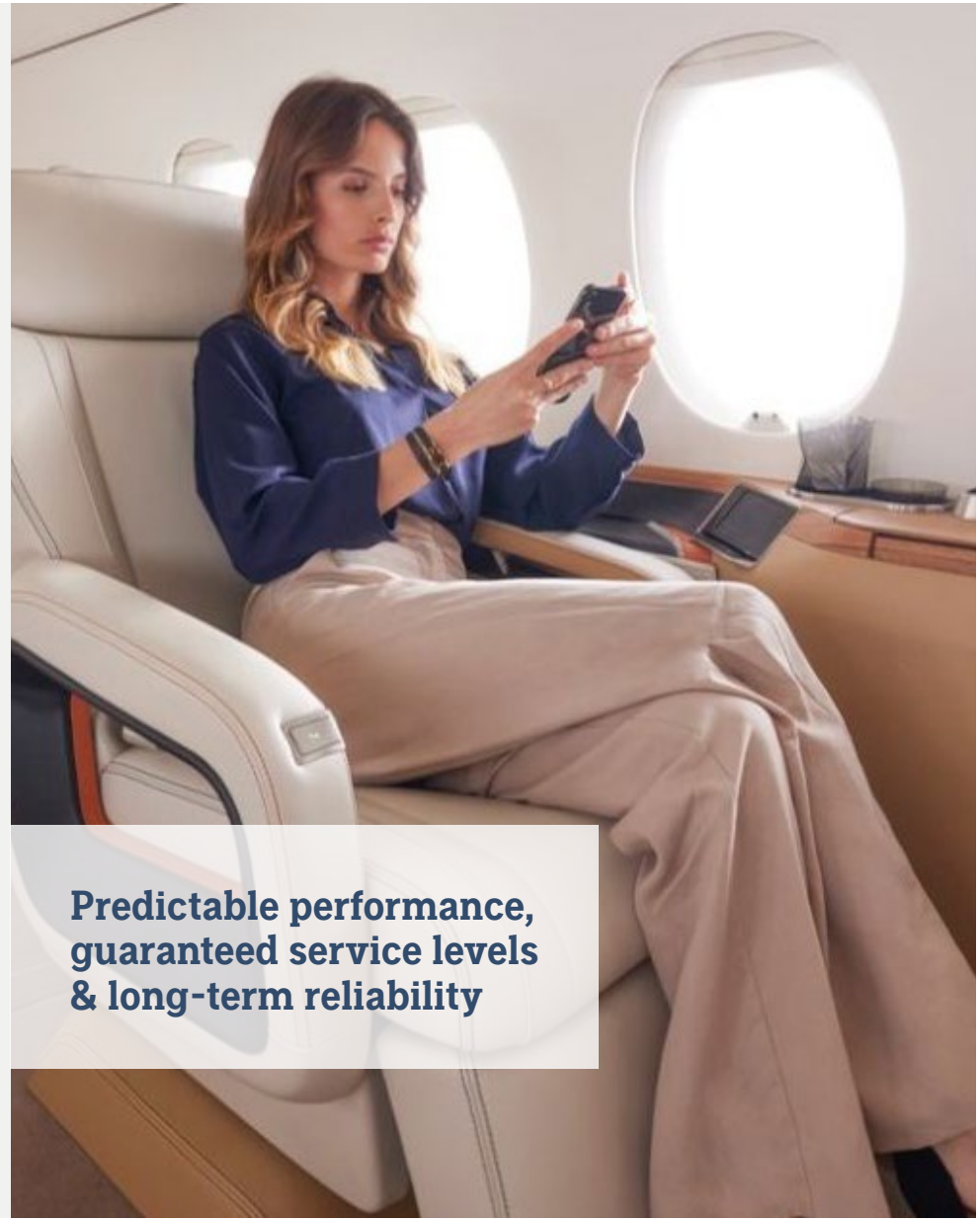
JETWAVE X
Preferred in-flight connectivity solution for Falcon

Guaranteed support with Dassault integration
- Integration on the aircraft guaranteed by Dassault Aviation
- Solution backed by Dassault support, included in FalconConnect program
- Assured service longevity (spare parts, obsolescence programs guaranteed with Honeywell)

Predictable service
- Committed Information Rate* ensuring consistent experience for passengers/crews (vs none for other systems)
- Standard industry latency, stable and predictable, low impact on real-time exchanges
- Guaranteed commercial terms and prices

Global Coverage
- True global Ka-band coverage and upcoming coverage for the polar regions
- Continuous service for global Falcon flights without “no-service zones” or regulatory uncertainty

*Committed Information Rate (CIR) — guaranteed minimum bandwidth available at all times, regardless of network congestion or sharing with other users





STARLINK FOR FALCON

Industry revolution with specific constraints

Structural integration guaranteed by Dassault

- Best in class fuselage mounted fairing
- No performance or cabin noise impact
- No system integration with existing IFE/CMS

Service and support 100% provided by SpaceX

- Direct contract with SpaceX for service plans, support and warranty, outside of Dassault's control
- Dedicated 24/7 Aviation Team includes telephone assistance, specialized account management and flight reliability teams
- No service commitment
- Block 4 equipment with best in industry performance

Expanding Coverage

- Approved over international waters, see Starlink for approved countries
- SpaceX constantly working on getting more approvals

COMPARISON RECAP

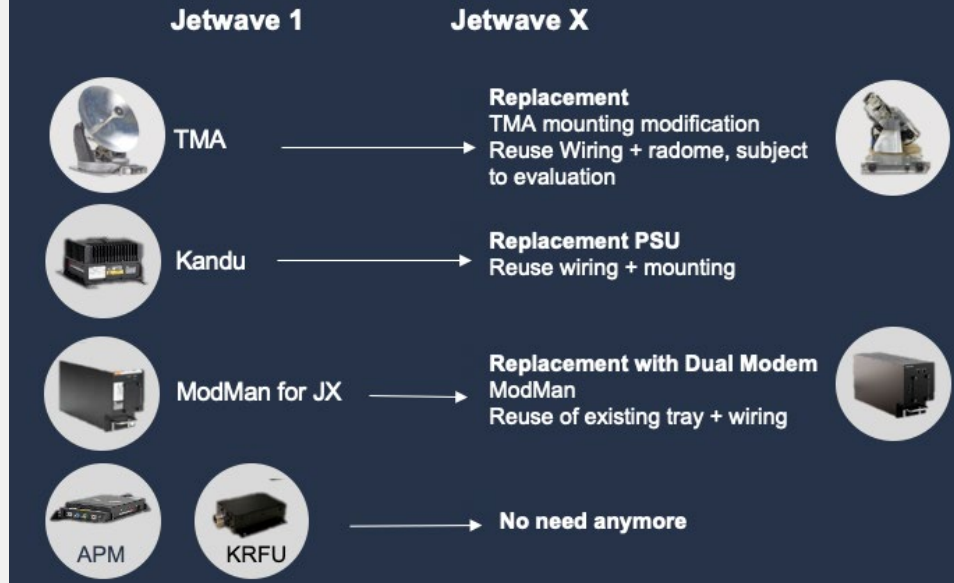
	JETWAVE X (2026)	STARLINK	GOGO GALILEO HDX	GOGO PSKU	GOGO PSKA	VIASAT KA
SATELLITE CONNECTIVITY	GEO Viasat Constellation	LEO Starlink Constellation	LEO Oneweb Constellation	GEO SES Constellation	GEO Viasat Constellation	GEO Viasat Constellation
SATELLITES CONSIDERATION	3 Viasat satellites / 5 Immarsat	8000+ satellites	600+ satellites	34 Satellites	5 Immarsat satellites	3 Viasat satellites
COVERAGE	No polar coverage but new satellites to be launched covering polar regions No geopolitical restrictions	Worldwide incl. polar regions	Worldwide incl. polar regions minus uncovered spots over oceans	Regional coverage	No polar coverage but new satellites to be launched covering polar regions No geopolitical restrictions	Regional coverage
HIGH SPEED	Up to 40 Mb/s (2026), 220 Mb/s (2027)	Up to 450Mb/s (2026), 1Gb/s (2027)	Up to 50 Mb/s	Up to 50 Mb/s (2026), 100 Mb/s (2026)	Up to 100 Mb/s (2026), 200 Mb/s (2027)	Up to 150 Mb/s (2026), 200 Mb/s (2027)
LATENCY	<1 sec	< 100 ms	< 200 ms	<1 sec	<1 sec	<1 sec
BAND	Ka-Band	Ku-Band	Ku-Band	Ku-Band	Ka-Band	Ka-Band

COMPARISON RECAP

	JETWAVE X (2026)	STARLINK	GOGO GALILEO HDX	GOGO PSKU	GOGO PSKA	VIASAT KA
DOWNTIME	≈ 1 month	≈ 1.5 month	≈ 1 month	≈ 1 month	≈ 1 month	≈ 1 month
FALCONCONNECT ELIGIBILITY	Yes	No	No	No	No	No
WW SUPPORT SERVICES	Yes Solution fully backed by Dassault support Usual Dassault Aviation / Honeywell Warranty	Yes Support via Starlink	Yes Support via Gogo	Yes Support via Gogo	Yes Support via Gogo	Yes Support via Gogo or Viasat
MONTHLY COST	Up to $22,000 / $13,900 (unlimited)	Up to $10,000 (unlimited)	Up to $11,500 (unlimited)	Up to $22,000 (unlimited)	Up to $22,000 (unlimited)	Up to $9,995 (unlimited)
PLANS FLEXIBILITY	Yes + Pay-as-you-go (FalconConnect)	No	Yes	Yes	Yes	Yes

JETWAVE X
Retrofit Installation

- Designed with a future-proof, network-agnostic architecture, JetWave X connects seamlessly to Viasat's ViaSat-3 constellation, Inmarsat's Global Xpress network, and future Ka-band constellations
- New modems / antenna for better throughput
- From Jetwave 1 to Jetwave X: only minor changes with less equipment installed
- Requires Ka radome like JetWave 1
- Can co-exist with Starlink

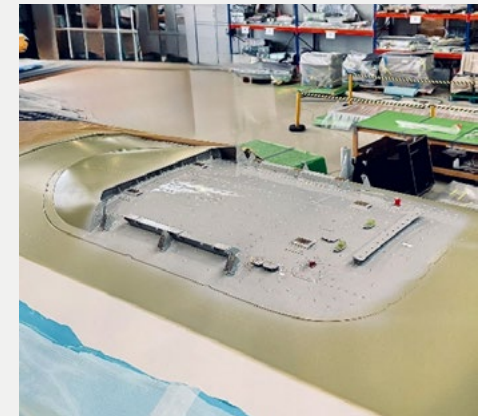




STARLINLK
Retrofit Installation

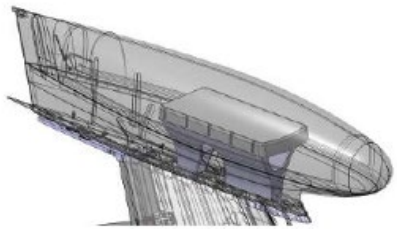
- Designed with a future-proof, total integration in Starlink network (8,000+ satellites). Service over an expanding list of countries (visit Starlink website)
- Block 4 modems / antenna, non-integrated with other systems (CMS/IFE controls)
- Can co-exist with Ka-band solutions
- No noise or performance impact with the Dassault designed and produced fairing
- Best in class performance





GOGO HDX
Retrofit Installation

- Designed to connect to an existing Gogo router (Avance or SDR)
- Single LRU upgrade with antenna under the fintip radome (no major structural installation). Cannot co-exist with any other tail mounted solution
- Expanding service coverage (visit Oneweb website)
- Need Ku radome - installed from factory on Falcon 7X







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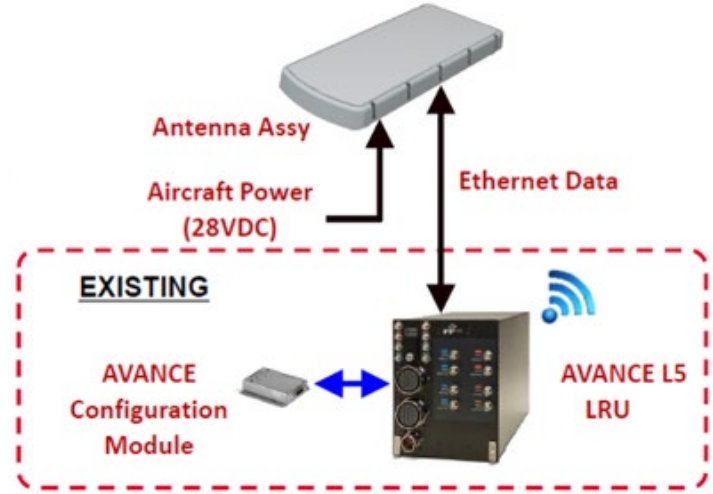




GOGO PSKU
Retrofit Installation

- Designed as a plug and play interchangeable system with PSKa
- Plane Simple Ku-band leverages SES's FlexExec network - purpose-built for business aviation this network is specifically engineered to cover high-traffic routes with High Throughput Satellite (HTS) coverage
- Need Ku radome - installed from factory on Falcon 7X

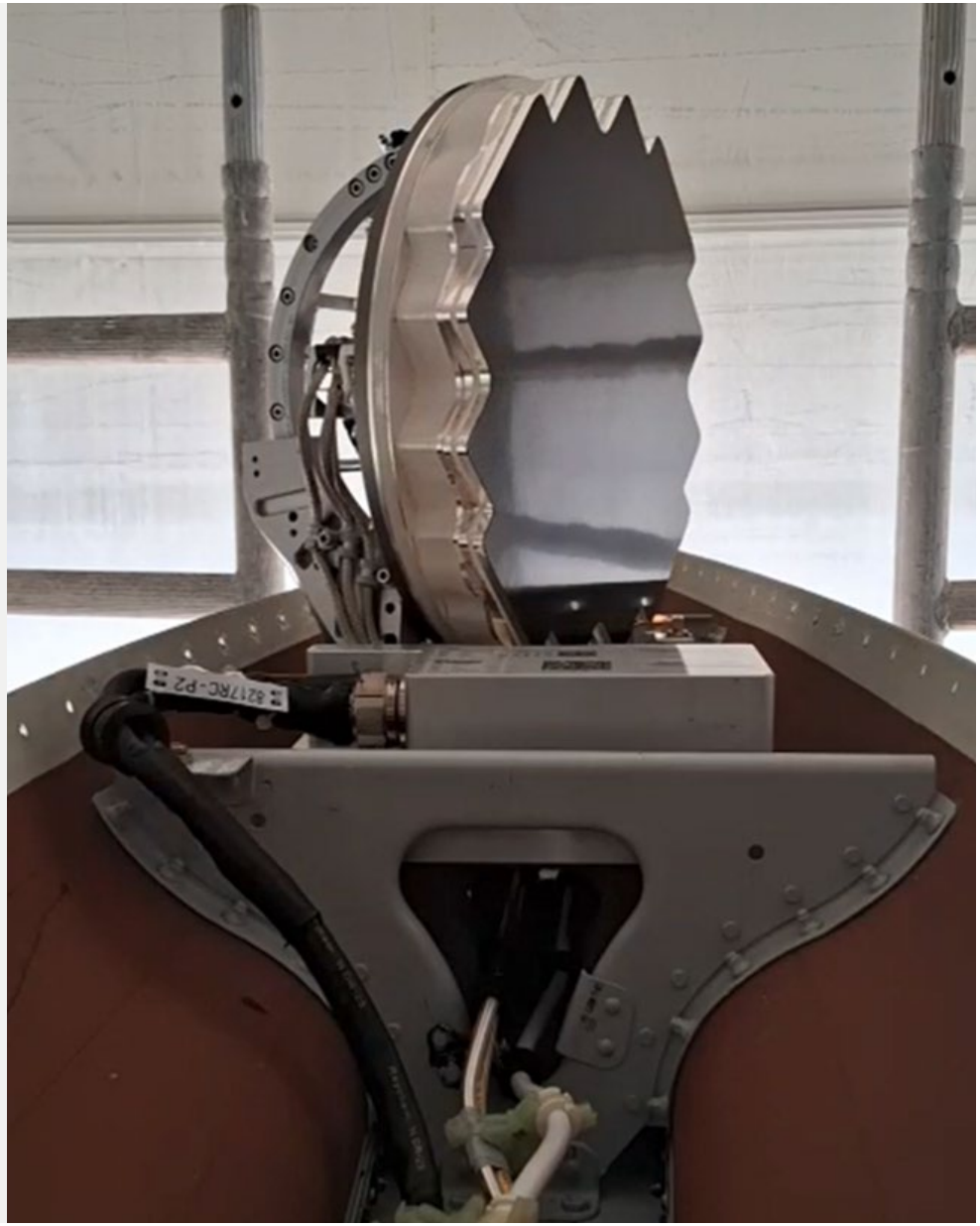




GOGO PSKA
Retrofit Installation

- Designed as a plug and play interchangeable system with PSKu
- Plane Simple Ka-band leverages Viasat's JetConneX global multi-layered broadband network with full prioritization for business aviation
- Similar or better performance than Jetwave 1 with less LRUs
- Uses Ka radome installed from factory on Falcon 8X

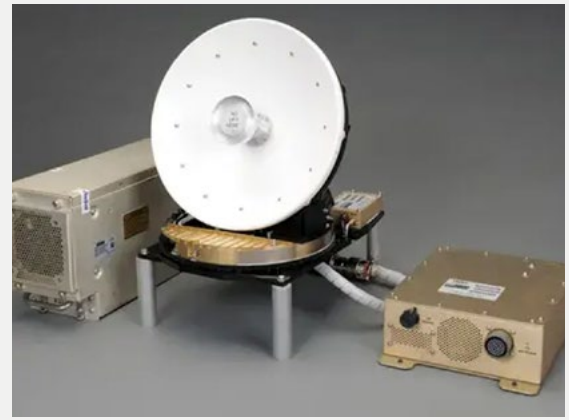






VIASAT KA
Retrofit Installation

- Designed to exclusively use the Viasat 1, 2 & 3 network
- Performance equivalent to JetwaveX but without ability to fall back on the legacy Inmarsat network
- Only other solution with Starlink where the hardware is made by the network operator
- Uses Ka radome installed from factory on Falcon 8X



FALCON **CONNECTIVITY**



AFTERMARKET SOLUTIONS SUMMARY

FALCONCONNECT

OEM designed and supported with proven technology

More than 250 customers

High adoption rate with new customers

New LEO Solutions

Starlink & Galileo

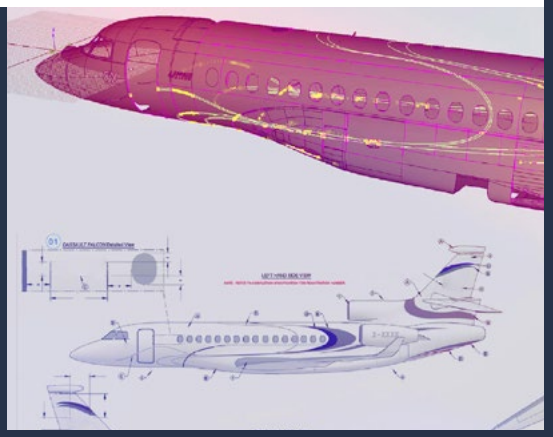
Industry disrupters already certified and available on Falcons

New GEO Solutions

Intelsat, legacy Inmarsat or Viasat, Dassault has certified solutions available

SERVICE CENTER – **DASSAULT MRO ADVANTAGES**







Forerunner
1st connectivity installations in DA MRO network

Risk mitigated
- trained technicians
- downtime demonstrated
- cost control

3D mock-up
Direct access to engineering data and 3D mock-up

Logistics
Preferred parts availability and pricing

Global support
Support by the worldwide Dassault group

DASSAULT AVIATION BUSINESS SERVICES | DASSAULT FALCON JET A Dassault Aviation Company | DASSAULT FALCON SERVICE A Dassault Aviation Company | EXECUJET MRO SERVICES A Dassault Aviation Company | Dassault MRO



CONNECTIVITY
GLOSSARY

GLOSSARY

Bandwidth
The maximum capacity of the connection — how much data could theoretically flow per second. Like the width of a highway — more lanes mean more potential traffic

Coverage
Where the service works (over land, ocean, global, etc.)

Geo
Satellite connectivity - Geostationary Orbit, Satellite is positioned far away — 35,000 km above earth. It rotates at the same speed as Earth — so it always stays over the same spot. Needs few satellites

Leo
Low Earth Orbit Satellites – Satellites orbit much closer to Earth and move fast across the sky. Orbit height 500–2,000 km above Earth. Aircraft antenna must track and switch from one satellite to the next as they move. Because they are closer, signals travel much faster = low latency. Needs many satellites. Like a relay race — as one satellite moves out of view, another takes over instantly

ATG
In aviation and telecommunications, ATG connectivity refers to an internet connection system for aircraft that uses ground-based cellular towers instead of satellites. Aircraft are equipped with antennas that connect to these towers

Committed Rate
Often called Committed Information Rate (CIR) — guaranteed minimum bandwidth available at all times, regardless of network congestion or sharing with other users

Ku-band / Ka-band
Frequency ranges used by satellites (higher = more capacity) to transmit data between the aircraft and the satellite. Think of them like different «radio channels» for internet from space. They determine how fast the connection can be, how much data it can handle, and how well it works in different conditions

- Ka-band: faster internet (more bandwidth = better for streaming, video calls, and many users)
- Ku-band is more widely available today with mature coverage, especially on international routes
- Both bands can support Wi-Fi in-flight, but Ka-band is usually the choice for premium, high-speed services

L-Band
Frequency Range: ~1 to 2 GHz (specifically around 1.5 GHz). Main uses in cockpit communications, Safety services (like SATVOICE, ATC comms). Low-bandwidth connectivity for cockpit and sometimes cabin. Very reliable, global coverage, low latency, but very low bandwidth so not suitable for streaming or fast internet.

Latency
Delay between sending and receiving data (important for video calls, Zoom, etc.). The lower the better.
This doesn't usually cause the screen to freeze or lag visually, but it delays real-time events, like live sports or video calls. Your video still plays smoothly, but you're behind real time. Measured usually in milliseconds (ms)

Mb/s
Megabits per second – measures internet speed (higher = faster)

Modem / Antenna
Hardware on the aircraft that connects to the network

Speed
How fast data is transferred (like downloading a file or streaming)

KB
MB or KB measure file size, 1 Kilobyte = 1,000 bytes

MB
MB or KB measure file size, 1 Megabyte = 1,000 Kilobytes
vs Mb/s (Megabits per second) measures speed.
If you're downloading a 50 MB file with a 10 Mb/s connection, it will take about 40 seconds

Throughput
The actual speed at which data moves over the internet connection on the aircraft. It tells you how much data is really being delivered to the users — not just the system's maximum capacity, but what passengers actually experience. Different from Bandwdith. How many cars are actually driving on the highway — not how many could

Voice (classic), VOIP
This distinguishes between two types of phone calls possible on board

- Classic voice: Satellite-based, circuit-switched voice calls via the aircraft's onboard phone system (like traditional phone lines)
- VoIP (Voice over IP): Calls made over the internet using services like WhatsApp, FaceTime Audio, or the FalconTalk app

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