INTELSAT®

# Satellite Connectivity Solutions for Commercial Airlines

Contents

Intelsat Connectivity Solutions

The global coverage and scalable capacity of the Intelsat Global Network enables streaming-quality Wi-Fi and Live TV to the entire cabin. Our access technologies include both single and multi-orbit antenna options for unsurpassed performance and industry-leading system availability. Intelsat's end-to-end managed services help you efficiently manage the bandwidth you need to provide the inflight experiences your passengers want.

Intelsat's open architecture design leverages today's Ku-band satellites and offers future-ready performance with high-throughput satellites (HTS). This allows Intelsat Commercial Aviation to deliver on the coverage and capacity needs for commercial airlines with global flight routes today—and tomorrow.

Aero Networks

Inflight Experiences

Onboard Systems & Software

Operational Support
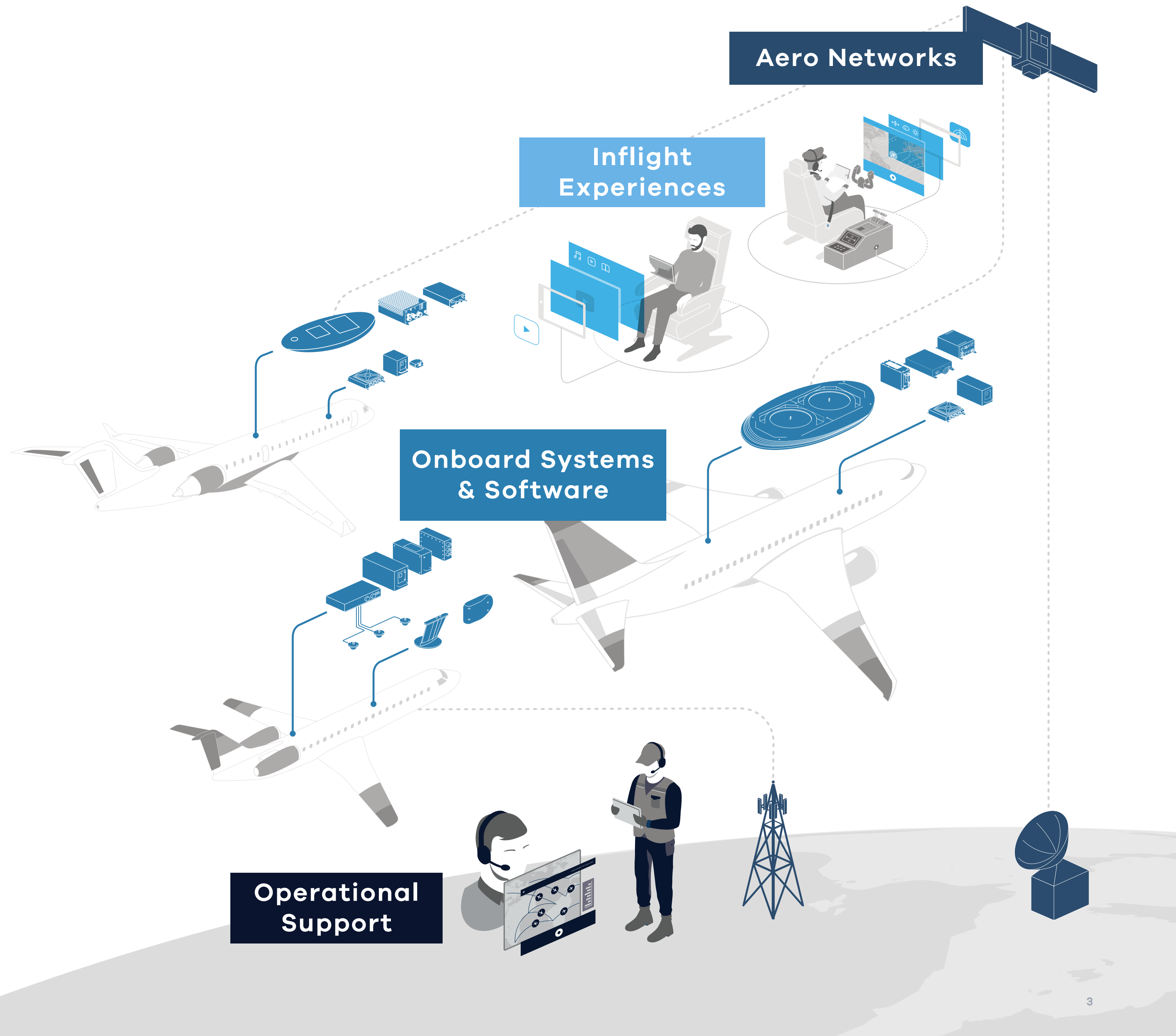
01

Satellite Access Technologies

Intelsat offers both single - and multi-orbit access technologies depending on your needs.

Signal Transmission

2Ku Antenna

- Two large aperture phased-array antennas
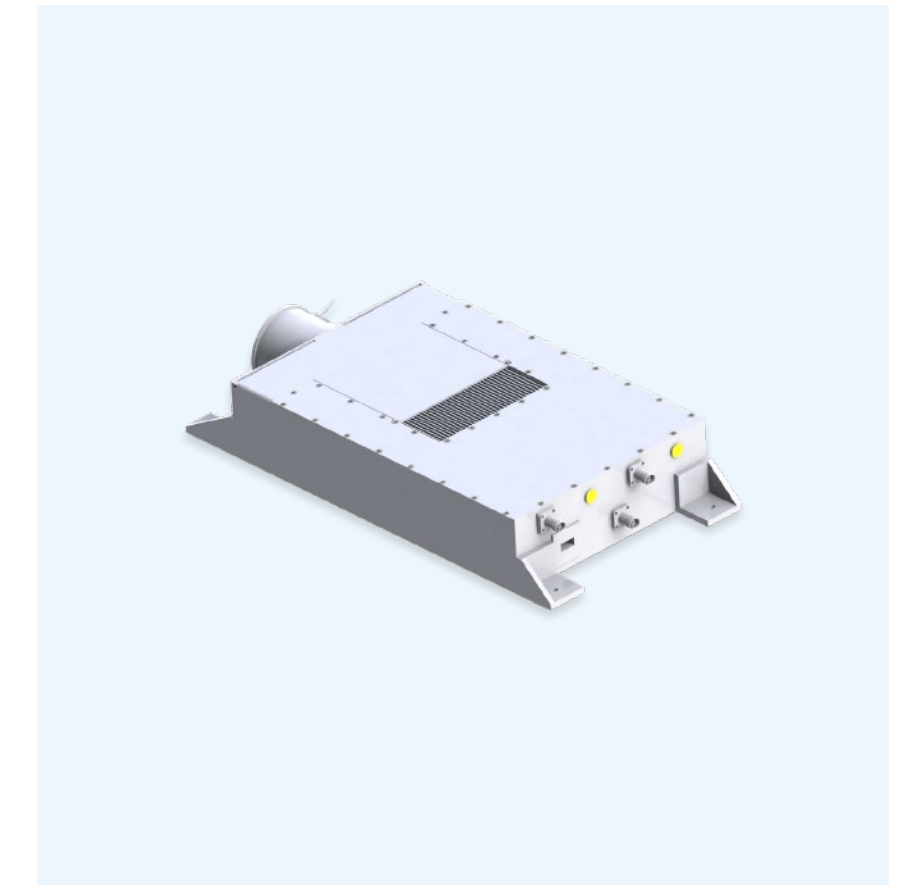- Advanced beam forming and steering

A791 (Taurus) MODMAN

Hosts the next-generation modem which modulates and demodulates L-band signals
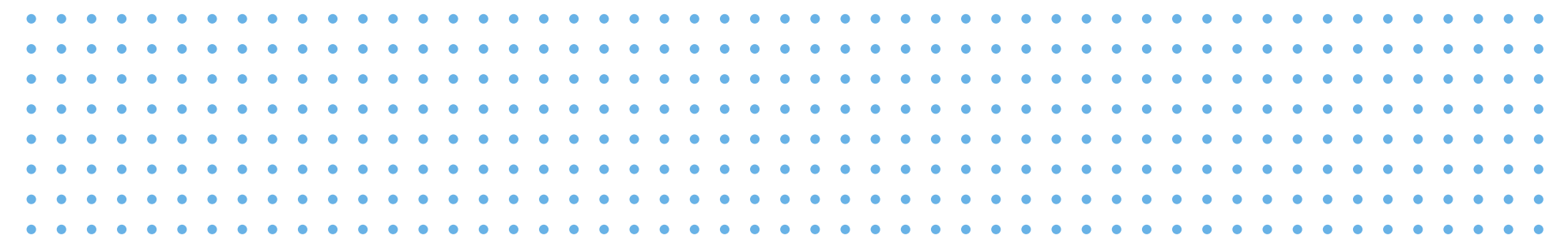

KANDU

Provides power to the satellite antennas and uses aircraft navigational data to control its movement

KRFU

Upconverts L-Band signals from the modem to Ku-band and amplifies them for transmission to the satellite

Signal Transmission

ESA Antenna

- Electronically-steered array
- Multi-orbit (GEO/LEO) antenna solution
- Coverage over every route

A791 (Taurus) MODMAN

Hosts the next-generation modem which modulates and demodulates L-band signals
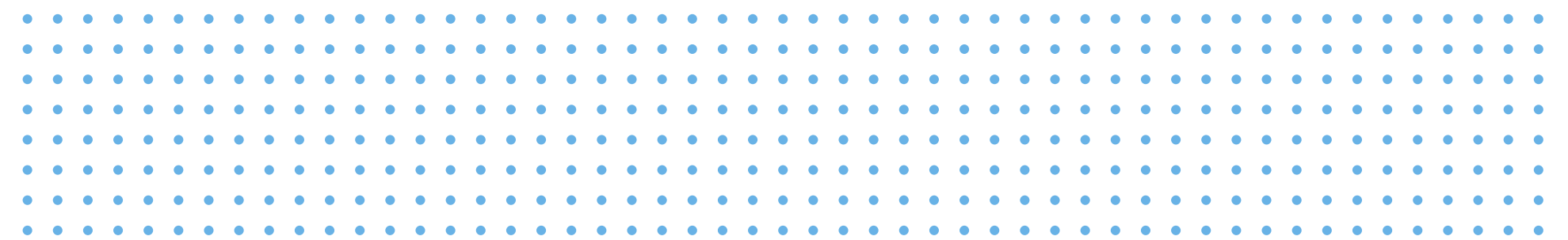
PSU

Power supply unit. Supplies power to both the Rx and Tx antenna arrays

ACMU

Antenna-pointing and networking data unit

02

In-cabin Network

Configurations for any aircraft

Our satellite IFC solutions are suitable for large commercial aircraft with global flight routes, regional narrow-body fleets, and cargo aircraft. Linefit, SB, and STC retrofit options are available.

In-cabin Network

The In-cabin Network consists of the essential airborne hardware that interfaces with aircraft access technology to power the passenger experience. The Onboard Server enables wireless content access via any device, including seatback screens over the dedicated In-cabin Network.

A791 MODMAN

The A791 MODMAN serves as both modem and onboard server in Service Bulletin (SB) and Linefit (LF) configurations.

In-cabin axWAP

Wireless Access Points provide the Wi-Fi signal to devices in the cabin and support the latest 802.11 standards, including 802.11ax.

# Reliable, High-speed Inflight Internet — Everywhere, All the Time

The Intelsat 2Ku Onboard System includes all the onboard hardware and software needed to deliver inflight internet access to passengers around the globe.

The heart of the system is the satellite access technology that includes two antennas—one for the forward link, which transmits data to the aircraft, and one for the return link, which receives data.

Built to deliver significantly more bandwidth to aircraft, our high-throughput modem minimizes service disruptions associated with beam switching, allowing faster satellite handoffs and a more consistent passenger experience.

Consistency drives CSAT

The Satellite Onboard System helps deliver a seamless, consistent passenger experience—a key driver of higher customer satisfaction scores for airlines worldwide.
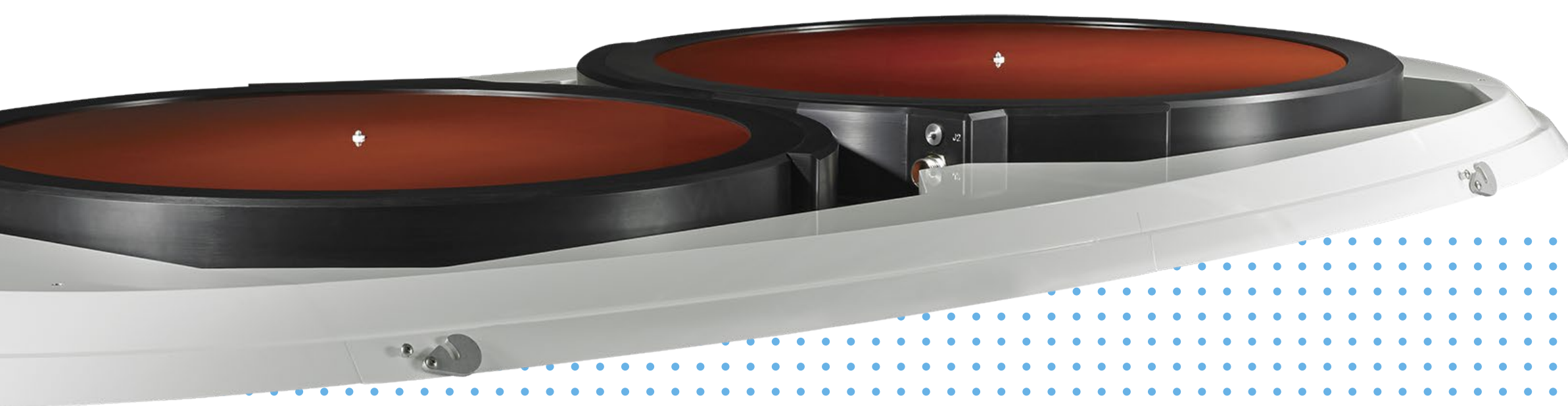
Enable unique inflight experiences

Connectivity and Entertainment Services

- Wi-Fi internet packages for messaging, browsing, and streaming

- Live TV: With the high bandwidth delivered by Intelsat 2Ku access technology, your passengers can watch live sports, news, or other live broadcasts on their own devices or the seatback

- Seatback integration with existing third-party IFE systems: Integrate connectivity with existing seatback IFE systems to enhance the passenger experience

03

Connected Aircraft Services

eEnablement
Connect pilot EFBs and crew mobile devices with broadband internet

Aircraft Data Access
Bring aircraft data to pilot devices in real time

Operational Solutions
Integrate connectivity services with third-party applications

04 Intelsat
Global Network

Geostationary and low Earth orbits each have their advantages as standalone networks, but a combined GEO plus LEO network outperforms them both by allowing passengers to remain connected, no matter where they are, even at busy hubs, across oceans, and over polar routes. And the good news is that Intelsat antennas allow you to utilize one or both network technologies, depending on where and what you're flying.
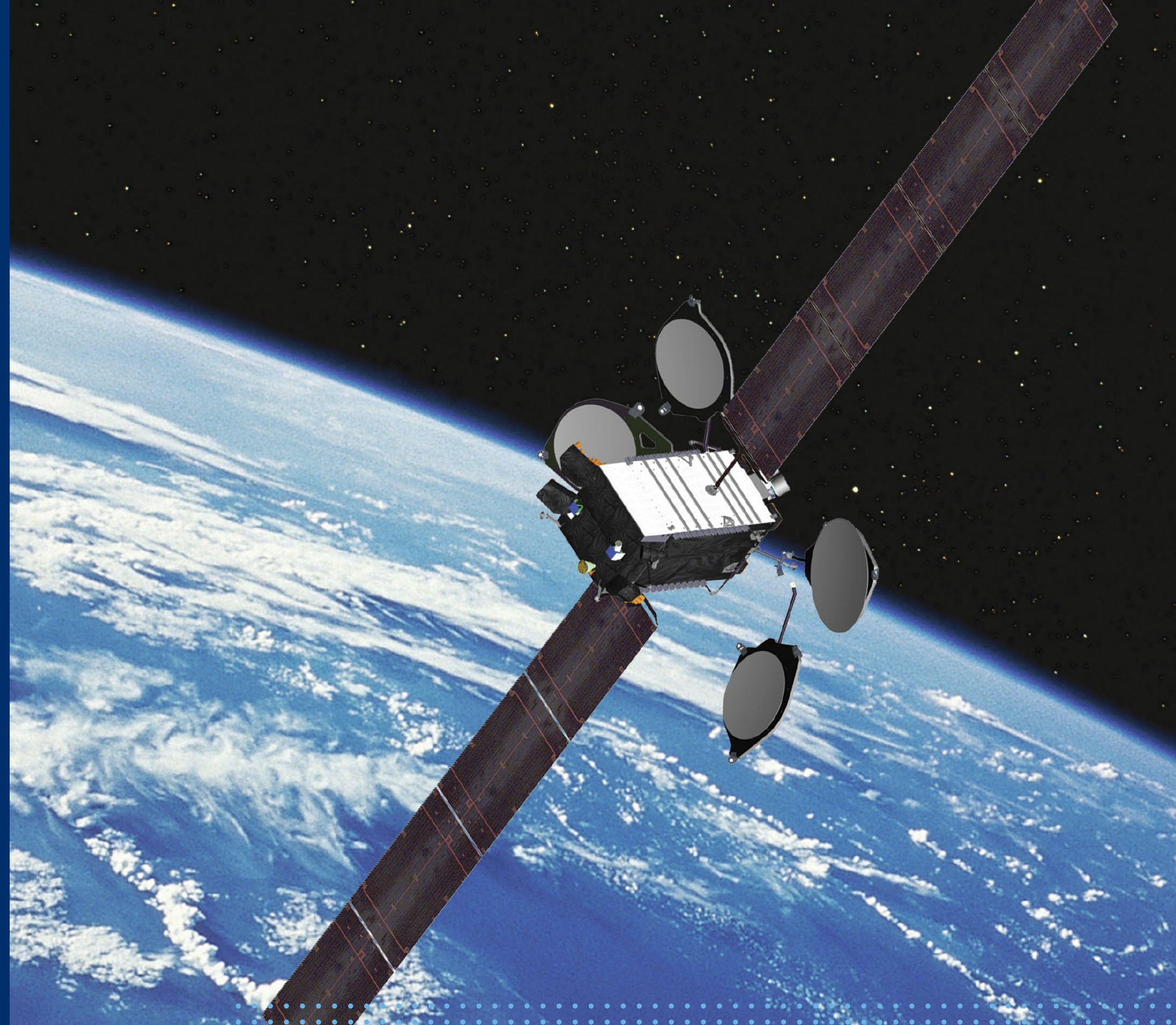
Multi-Orbit Coverage

Only Intelsat can offer the benefits of LEO's low latency along with the redundancy GEO provides to address network hotspots that LEO networks on their own cannot address.
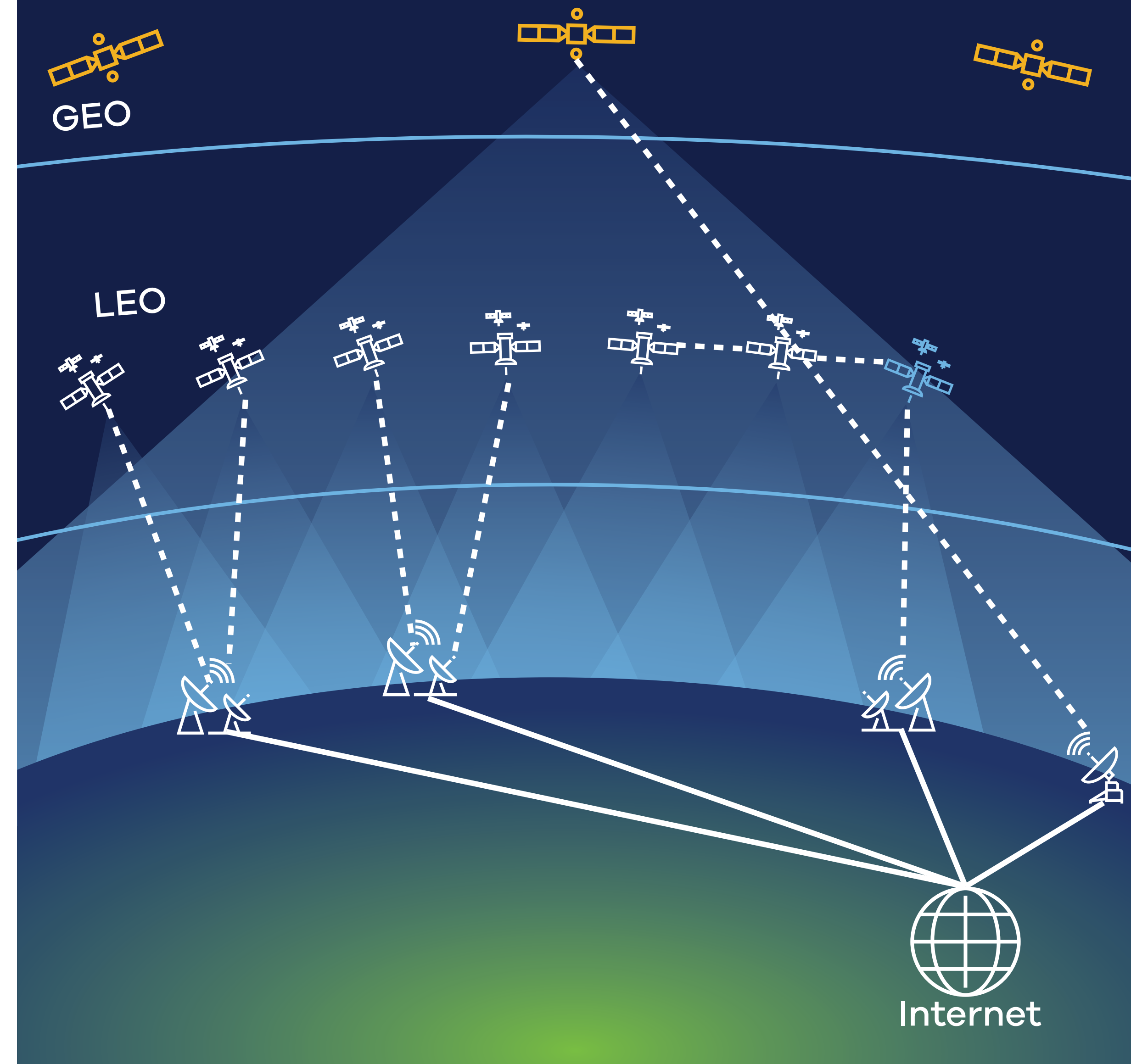
Benefits:

GEO:
-Highest throughput
-98% global coverage
-Proven reliability

LEO:
-Multi-orbit redundancy
-Polar coverage
-Lowest latency

GEO

LEO

Internet

05 Installation Options

As airlines replace aging aircraft and expand their fleets, linefit installation is an area of continued focus for us. We continue to progress with an expanding number of Service Bulletins (SBs) and Linefit options at major OEMs for the most in-demand aircraft.

In addition to our secured Supplemental Type Certificates (STCs), Intelsat also offers fleet survey, design substantiation and comprehensive engineering support for retrofit installations.

Talk to us about the best option for your specific aircraft needs and timing.

Linefit deliveries

Crew Support

- Prepare flight crews with training on the inflight experience, connecting to Onboard Systems, and passenger service-issue interaction

- Train your airline technical operations and third-party partners on Onboard System maintenance

Maintenance Tools

- Increase visibility into the Onboard System with Wi-Fi Onboard System Health and enable flight crews to communicate system issues while in flight to resolve them quickly and efficiently

- Leverage Built-in Testing to help airline maintenance teams and/or third-party partners actively maintain and trouble shoot onboard systems

Retrofit installations

Prototype Phase

- Certify system hardware from telecommunications agencies in countries where an airline's aircraft are registered or based to ensure RF regulatory compliance

- Complete the process to obtain a new Supplemental Type Certificate (STC), make minor updates, or obtain an amendment from civil aviation authorities to install Intelsat Onboard Systems

Production Installation

- Receive on-site support for production installations or troubleshooting of Onboard Systems

- Train your airline technical operations and third-party installers on Onboard System installation

In-service Maintenance

- Intelsat supports retrofit installs with the same in-service maintenance support as linefit deliveries in addition to Aircraft Technical Services (ATS) support
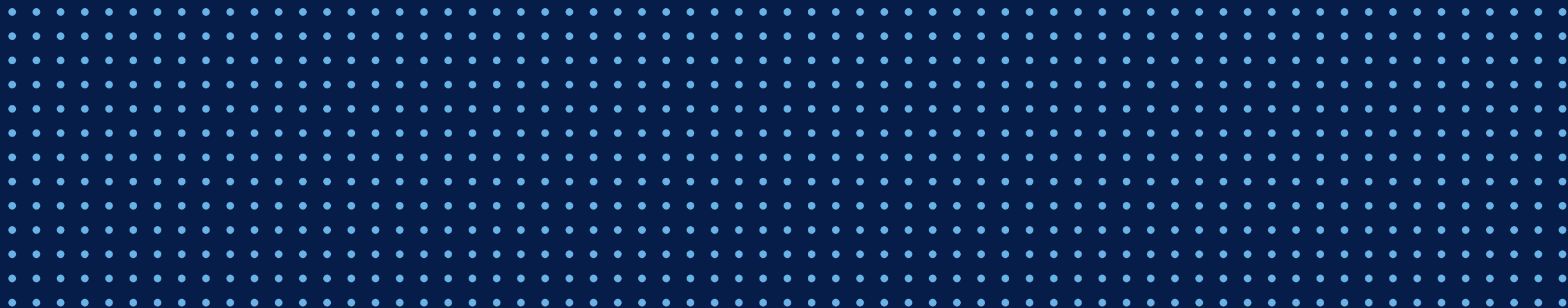
Ready for the Bold, New Future?

Meeting the high expectations of passengers and delivering more business to your airline begins by exploring Intelsat's unifying network of tomorrow. Only Intelsat delivers the size, scale and advanced technology to drive this global unification. It's a leap forward in flexibility, scalability, and world-class passenger experience.

See how Intelsat can help you shape the future of connected air travel.

Speak with an Intelsat expert today.
intelsat.com/product-consultation

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