

# Iridium **NEXT**

Changing the future of satellite  
communications NOW



 **iridium**<sup>®</sup>  
Everywhere



An Iridium NEXT satellite is shown in orbit above the Earth's horizon. The satellite has a complex structure with multiple solar panel arrays extended. The background is a deep blue space filled with stars and nebulae. The Earth's curve is visible at the bottom, with a bright light source (the sun) creating a lens flare effect.

# Iridium NEXT is taking flight

Iridium is delivering on its uncompromising vision for the future of global communications: Iridium NEXT.

Iridium's groundbreaking second-generation satellite constellation will enable innovations today and those yet to be imagined, while providing continued high performance and reliability for all existing Iridium® solutions – far into the future.

Iridium NEXT is driving innovation, creating opportunities and changing the way people and organizations communicate – everywhere on the planet.

## A new era of innovation

Delivering global, reliable and enterprise-grade services while redefining the capabilities of satellite communications, Iridium Certus<sup>SM</sup> is the new service platform to be powered by the \$3 billion Iridium NEXT constellation. Iridium Certus will offer more than just connectivity – it is a portfolio of ever-expanding service offerings that will allow your business to operate more efficiently by providing more value and coverage than any other satellite operator.

With a range of speeds eventually up to 1.4 megabits per second after Iridium NEXT deployment is completed, Iridium Certus is being built to support an innovative portfolio of partner products and satisfy a wide-ranging set of maritime, aviation and land mobile communication needs.

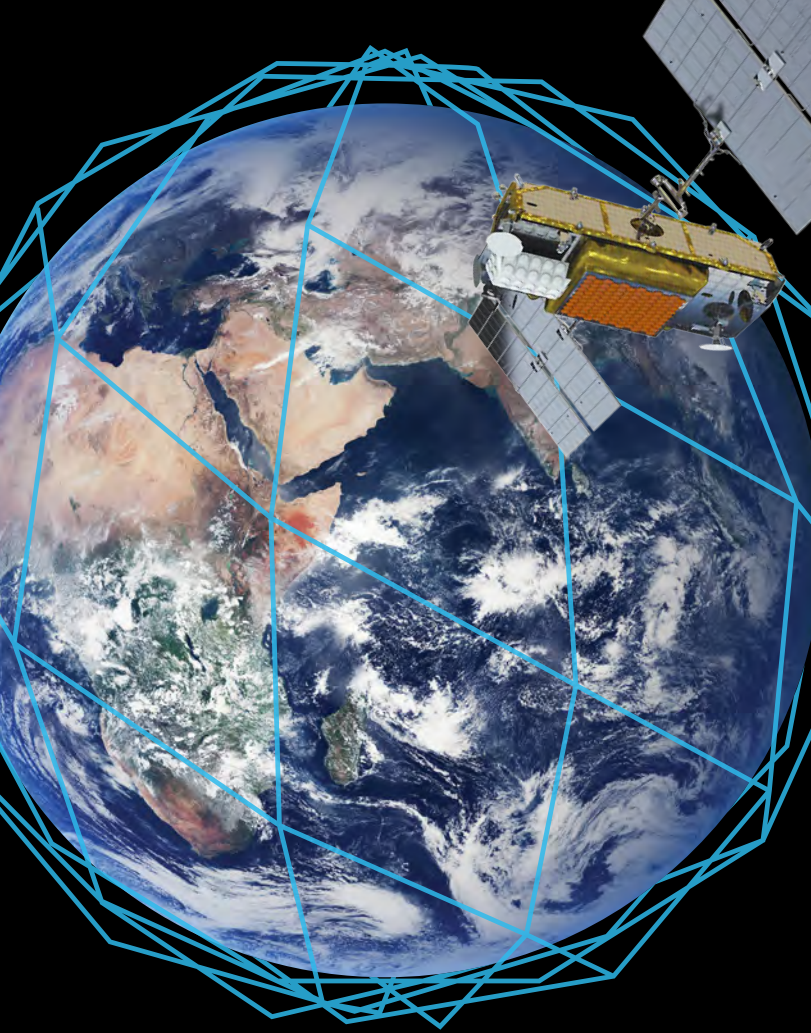
**Maritime:** From merchant vessels to the coast guard, Iridium is a preferred, trusted provider for maritime satellite communications for operational and safety services. Iridium Certus will set a new standard with small, robust, all solid state equipment providing the highest L-band throughput to any seas. It is the technology maritime has always wanted – all of the benefits of resilient L-band frequencies combined with high bandwidth and truly global coverage.

**Aviation:** Iridium is a preferred, trusted provider of aviation satellite communications for improved operational efficiencies and safety-critical services offered via a global network of channel partners for operators across all market sectors and geographies of the world.

**Land Mobile:** Iridium Certus will set a new standard for remote communications and connectivity for enterprises, governments and individuals that want to extend their use of mobile networks into remote areas, without having to deploy ground-based infrastructure or expensive terminals. Iridium Certus will integrate with internet, cellular, Land Mobile Radio System, and location-based applications to keep you connected anywhere on the planet.

**M2M:** Higher speeds, small form factor transceivers, and increased bandwidth will unlock new possibilities in asset tracking, fleet management, remote monitoring, command and control and other intelligent data applications, while Iridium's reliable SBD and LBT products will continue to be supported for years to come. And Iridium Certus will provide a new platform for innovative and powerful Iridium M2M solutions across the globe.

**Government:** Powered by Iridium NEXT, Iridium Certus broadband will support reliable, global, pole-to-pole expeditionary communications for military users supporting all aspects of air, land and sea operations. It is the ideal solution for Enroute Mission Command and Control (EMC2) and other broadband applications where beyond line of site communications are critical to mission success. Whether you are supporting planned or contingency operations, Iridium Certus will be there when you need it most.



## The world's largest commercial satellite constellation

Iridium NEXT will maintain a uniquely sophisticated architecture of 66 cross-linked Low-Earth Orbit (LEO) satellites, delivering high-quality, truly mobile voice and data coverage over the planet's entire surface – including oceans, airways and polar regions.

In space, each Iridium NEXT satellite will be linked up to four others – two in the same orbital plane and one in each adjacent plane – creating a dynamic mesh network that routes traffic among satellites to ensure a continuous connection, everywhere.

Combined with redundancies across the network, and secure, dedicated ground infrastructure, this unique configuration will allow services using the Iridium network to continue to remain unaffected by natural disasters, including hurricanes, tsunamis and earthquakes that can cripple terrestrial infrastructure.

**66 Low-Earth Orbit (LEO) Satellites:** The large number of fast-moving satellites with multiple overlapping spot beams minimizes missed connections and dropped calls. The LEO orbit also provides a shorter transmission path with less signal attenuation.

**15 spares (6 in-orbit, 9 ground):** The in-orbit spares can be quickly repositioned and activated, as needed.

**Unique LEO constellation:** At only 476 (780 km) from the earth, the proximity of Iridium's LEO network means pole-to-pole coverage, a shorter transmission path, stronger signals, lower latency and shorter registration time than with GEO satellites. The network is considered a meshed constellation of interconnected, cross-linked satellites so that each satellite "talks" with the other nearby satellites in front, behind and adjacent orbits.

**Global, pole-to-pole coverage:** In space, each Iridium satellite is linked to up to four others creating a dynamic network that routes traffic among satellites to ensure global coverage, even when traditional local systems are unavailable.

**L-band availability:** Take advantage of reduced interference from weather and a more reliable network.

## Transforming the business of hosted payloads

A founding member of the Hosted Payload Alliance, Iridium is a leader and visionary in making space more accessible. Iridium PRIME<sup>SM</sup> is the world's first turnkey payloads solutions on standalone satellites, designed to reduce the complexity and costs of access to space-based services.

Iridium also secured one of the industry's largest deals to date for the primary hosted payload space on Iridium NEXT with Aireon<sup>SM</sup>. The partnership with leading ANSPs and investors from around the world, including NAV CANADA, ENAV, Irish Aviation Authority and Navair, will revolutionize global air traffic surveillance by providing global visibility of all equipped aircraft.

## Powering possibilities to meet any need

Building on an already powerful network, Iridium NEXT dramatically enhances Iridium's ability to meet the growing demand for global mobile communications on land, at sea and in the skies. The flexibility of the Iridium network enables partners to create innovative products and solutions that meet emerging and future market needs.

Iridium NEXT will:

- Support increased bandwidth and higher speeds for new products
- Enable exponential growth of partner solution development
- Backwards compatibility provides service continuity for existing products
- Support Aireon's aircraft tracking service as well as other hosted payload missions
- Provide the satellite platform and network for hosting innovative new capabilities on Iridium PRIME satellites



## Only one communications company connects the entire globe

Iridium commands the world's furthest reaching network, making it the only truly global communications company with solutions that span from pole-to-pole. Iridium voice and data products provide superior communications solutions that allow global companies, government agencies and individuals to stay connected everywhere.

With a unique, global ecosystem of partners, Iridium continues to create new, high-value capabilities that are leading the world into a new era of communication.



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