

# The Telesat Lightspeed Network



Telesat has developed a highly innovative global network composed of 198 state-of-the-art Low Earth Orbit (LEO) satellites, seamlessly integrated with on-ground data networks.

### The Telesat Lightspeed Network incorporates next-generation technology including:



**Data Processing in Space:** Full digital modulation, demodulation, and data routing occurs in space, resulting in higher capacity and flexibility.



**Phased Array Antennas:** Sophisticated antennas on each satellite with hopping beams scan the earth to provide full coverage and can dynamically focus capacity precisely where users require it.



**Optical Inter-Satellite Links:** Data can travel at the speed of light from one satellite to another, resulting in a fully interconnected global mesh network that allows customers to access the Telesat Lightspeed Network no matter where they are.



**Hybrid Orbits:** Satellites fly in a combination of orbits, resulting in complete global coverage, including polar areas, with higher capacity where most of the world's population lives.

## Unsurpassed performance at transformative economics



High Throughput:

Gigabits per second speeds to a remote, and multiple Tbps of capacity in the network ensures enterprise-grade connectivity for unconstrained video streaming, video conferencing and file transfers.



Low Latency: The Telesat Lightspeed Network is about 20-times more responsive than today's geosynchronous satellites and on par with fibre networks. Service providers can be confident that encrypted web pages and enterprise cloud applications will work seamlessly.



Global Coverage: Every point on Earth is covered, including polar regions.



High Capacity for Hotspots:

Our intelligent network can dynamically allocate bandwidth to areas with high traffic demand such as large communities or airport hubs.



Always On:

Highly resilient network with multiple interconnected satellites and multiple ground nodes without any single point of failure ensures networks always stay connected.



Quick Service Deployment:

Compliant with MEF 3.0 standards for seamless plug and play integration.

# **Telesat Lightspeed**

#### Verified Performance

Telesat has conducted several testing campaigns with leading maritime, aero and enterprise service providers, demonstrating industry-leading high throughput and quality.

Telesat Lightspeed services will be available through leading connectivity service providers. To learn more, visit <a href="https://www.telesat.com/lightspeed">www.telesat.com/lightspeed</a>

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Visit us at telesat.com



Leveraging over 50 years of technical expertise and leadership as a global satellite operator, we are redefining space-based connectivity with our innovative Telesat Lightspeed constellation. Telesat is uniquely positioned to deliver this transformative, disruptive service to the world.