LIGHTSPEEDTM

The world's most advanced LEO constellation

Telesat Lightspeed satellites are 35 times closer to Earth than today's geostationary (GEO) satellites, resulting in 30-50 milliseconds of latency compared to 600-800 ms at GEO.

GEO 36-000 KM

Telesat Lightspeed delivers unsurpassed performance at transformative economics for Aeronautical, Maritime, Enterprise, Telecom and Government customers

Next-generation technologies provide unique benefits to users:



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



LEO T-000 KM

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



DATA PROCESSING IN SPACE:

Full digital modulation, demodulation, and data routing occurs in space, resulting in higher capacity and flexibility



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

TELESAT