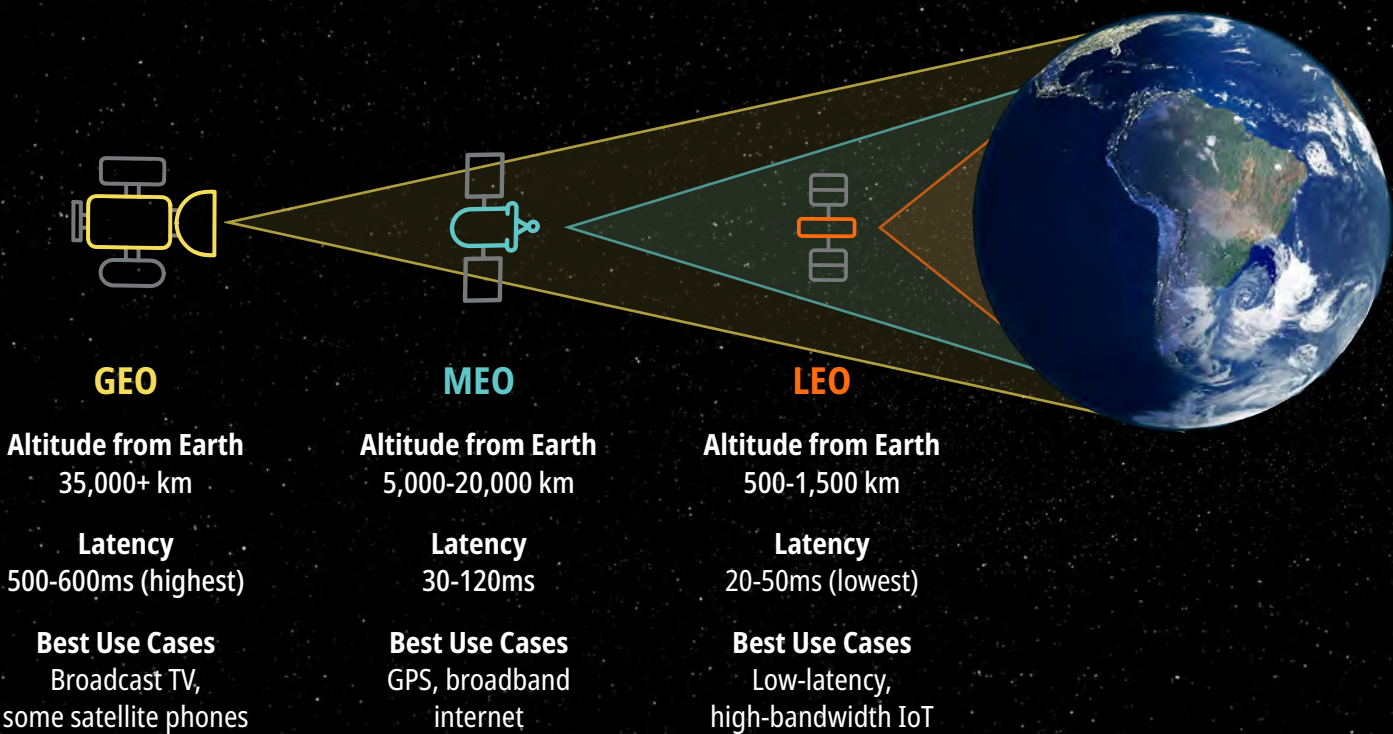


Why LEO Satellite Connectivity is the Future of IoT Communications

The Key to Massive and Critical IoT Connectivity

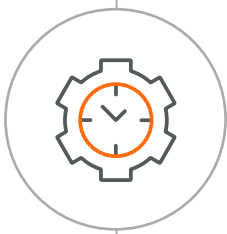
Satellite connectivity is not only rapidly growing to meet the demand of “always-on” connectivity around the globe, but this sector of mobile communications is also quickly evolving. Newer, more lightweight satellites launched closer to Earth are driving connectivity in a host of use cases: Low Earth Orbit (LEO) satellites. Compared to MEO (Medium Earth Orbit) and GEO (Geostationary Earth Orbit) satellites, LEO satellites offer strong performance for Massive IoT use cases, which are simpler devices transmitting data, and Critical IoT use cases, which require real-time data communications for device-level activity and remote operations.

How Different Satellite Orbits Compare



Why LEO Satellites Are the Preferred Choice for IoT

LEO has **several advantages** when selecting it for a variety of IoT use cases, including agriculture, military, maritime, environmental, and more.



Lower Latency for Real-Time Communication

- LEO satellites’ close proximity to Earth reduces latency, ensuring instantaneous data exchange for mission-critical applications.
- For real-time IoT solutions, low latency is essential – making LEO the best choice for two-way command and control.

Higher Bandwidth & Faster Throughput

- **Shorter distances** = stronger signal strength and higher data speeds with minimal degradation.
- **Supports data-heavy applications**, such as continuous sensor monitoring, predictive maintenance, and AI-driven automation.



Global Coverage with Continuous Connectivity

- LEO satellite constellations work in groups, ensuring seamless, gap-free coverage across the world.
- Unlike GEO, which remains fixed, and MEO, which has limited passes, LEO satellites provide consistent communication anywhere on Earth.

Capturing Powerful Satellite Communications

For reliable, repeatable, global connectivity that supports the many requirements of IoT – from lower power to mission-critical – LEO satellite connectivity offers numerous significant advantages.



Want to learn more?

Check out this ABI Research report that delves into the full details on satellite connectivity.

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