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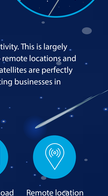
LEO communications and the opportunities for businesses



Low-Earth orbit communications aren't new. The first satellites, including Sputnik, were all in LEO. However, practicalities have limited their use for internet service providers until now...

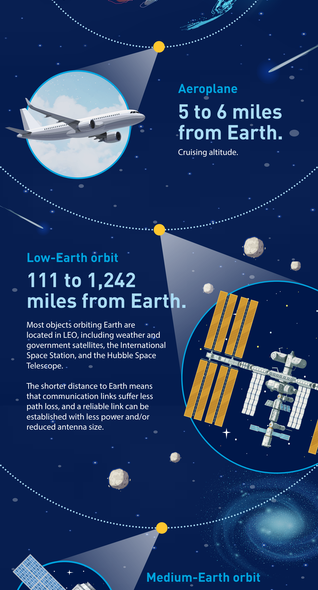
Certain industries struggle to attain network connectivity. This is largely due to the high cost or impossibility of laying fiber to remote locations and moving objects such as ships and aeroplanes. LEO satellites are perfectly positioned to resolve these issues, as well as supporting businesses in more urban locations.

Benefits of LEO

- Reduced latency
- Higher bandwidth
- Faster download speeds
- Remote location connectivity

Earth

The extensive ground equipment required to maintain an LEO constellation means the service comes at a premium. But for some businesses, the impressive benefits far outweigh the cost.



Aeroplane

5 to 6 miles from Earth.

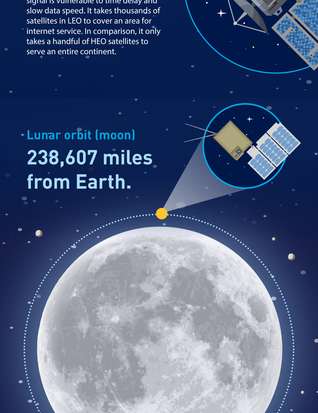
Cruising altitude.

Low-Earth orbit

111 to 1,242 miles from Earth.

Most objects orbiting Earth are located in LEO, including weather and government satellites, the International Space Station, and the Hubble Space Telescope.

The shorter distance to Earth means that communication links suffer less path loss, and a reliable link can be established with less power and/or reduced antenna size.



Medium-Earth orbit

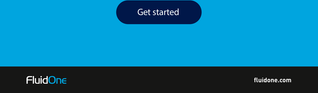
1,242 to 22,232 miles from Earth.

Primarily used for GPS and other Positioning, Navigation and Timing (PNT) services.

High-Earth orbit (geostationary orbit)

22,236+ miles from Earth

HEO satellites are so far away that the signal is vulnerable to time delay and slow data speed. It takes thousands of satellites in LEO to cover an area for internet service. In comparison, it only takes a handful of HEO satellites to serve an entire continent.



Lunar orbit (moon)

238,607 miles from Earth.

Who stands to gain the most from LEO?

- Aviation
- Maritime
- Energy
- Agriculture
- Tourism

Our expert team is ready to help you navigate the journey to reliable connectivity

Get in touch with us today to discuss your requirements, or explore your options with our postcode checker.

Get started