

COMSAT Certus

COMSAT is the sole service provider of Iridium Certus services for the DoD's Enhanced Mobile Satellite Services (EMSS) Program

Iridium Certus Network

Certus is the only fully global data and voice network. Satellite and terrestrial redundancy offers exceptional network availability to five nines due to its unique LEO architecture with 66 interconnected satellites (9 in-orbit spares and 6 ground spares).

Network Security and Performance

Certus offers shorter transmission paths, stronger signals, lower latency and shorter registration time than GEO satellites. This is the only ComSatCom network that lands in a DoD Gateway and the only ComSatCom network that doesn't traverse foreign soil, furthermore DoD traffic has absolute priority across the network.

The meshed constellation cross-links provide path resiliency as satellites linked in front, behind and in adjacent orbits. Rapid satellite transitions and interconnections minimize the impact of network performance anomalies, whilst providing very low probability of signal detection and interception.

Certus terminal software supports rapid technology evolution and interoperability to tactical radio nets and commercial terrestrial solutions such as TrellisWare.

Certus is compatible with the existing Iridium network and devices for backwards compatibility and service continuity.

Benefits to DoD Users

- Purchase hardware, SIM cards, and airtime through DISA Storefront
- Traffic does not traverse foreign soil, user terminal connects directly to the EMSS Gateway via inter-satellite links
- 24/7 NOC and Customer Care supported by cleared staff in the US



IP Data

Certus offers background IP and Streaming IP services. Background IP throughput is determined by the terminal class.

Streaming IP Data provides virtual circuits (VC) of; 4.8 Kbps, 9.6 Kbps, 14.4 Kbps, 28 Kbps, 40 Kbps, 56 Kbps, 128 Kbps, 168 Kbps and 256 Kbps.

Steaming IP supports applications such as encrypted voice up to video backhaul from UAVs.

Iridium Certus 20	22 / 22 Kbps
Iridium Certus 100	88 / 88 Kbps
Iridium Certus 200	176 / 176 Kbps
Iridium Certus 350	352 / 352 Kbps
Iridium Certus 700	352 / 704 Kbps
Iridium Certus 1400	512 / 1408 Kbps

Iridium Burst (Short Burst Data)

Iridium Short Burst Data (SBD) solutions for personnel and asset tracking, remote sensors and environmental monitoring are compact, rugged and reliable, ensuring you and your equipment are secure.

High Quality Voice

New and improved voice codec for delivering superior voice quality.

- Double bandwidth allocated to HQ calls
- Near toll-quality (3.5 MOS)
- Low latency for real-time connection
- Minimized distortions

Provides cellular phone-type voice quality in mobile satellite networks.

How to Buy

To purchase, please contact sales@comsat.com.

- Cobham Sailor 4300 - Certus 300 & 700 class
- Honeywell Aspire 150 - Certus 300 & 700 class
- Honeywell Aspire 300 - Certus 300 & 700 class
- Thales MissionLINK - Certus 300 & 700 class
- Thales VesseLINK - Certus 300 & 700 class

Certus 300 & 700 class aviation terminals are in certification. Users are encouraged to provide COMSAT with their requirements and mission needs.

Certus 20, 100 & 200 are in Preliminary Design Review and anticipated for beta testing Spring 2019. Beta testers are encouraged to reach out to COMSAT to register for workshops and test campaigns.

