

Intelsat 11

Hybrid C-band and Ku-band Commercial Communications Satellite for Intelsat



Mission Description

The Intelsat 11 satellite manufactured for Intelsat carries a hybrid payload. Located at an orbital slot at 43 degrees West Longitude, the satellite's C-band payload serves the Continental United States (CONUS), Mexico and South America and the Ku-band payload serves the DIRECTV Latin America downlink coverage area of Brazil. The Ku-band payload also has uplink capability from the CONUS, Mexico, Europe, and Northwest and Southeast South America.

GEOStar™ Satellites for Intelsat

Intelsat 11 is one of ten Orbital ATK GEOStar communications satellites ordered by Intelsat.

- Galaxy 12
- Galaxy 14
- Galaxy 15
- Horizons-2
- Intelsat 11
- Intelsat 15
- Intelsat 16
- Intelsat 18
- Intelsat 23
- Intelsat 28



Intelsat 11 undergoes testing in the Antenna Range at Orbital ATK's satellite manufacturing facility in Dulles, Virginia.

FACTS AT A GLANCE

Coverage:
The Americas



Mission:

C-band communications for CONUS, Mexico, and South America; Ku-band downlink communications for Brazil (spot coverage over Mexico, Venezuela and Florida), and uplink communications for CONUS, Mexico, Europe, and Northwest and Southeast South America

Customer:
Intelsat

Intelsat 11

Specifications

Spacecraft

Launch Mass:	2,500 kg (5,512 lb.)
Solar Arrays:	Four panels per array, UTJ Gallium Arsenide cells
Stabilization:	3-axis stabilized; zero momentum system
Propulsion:	Liquid bi-propellant transfer orbit system; monopropellant (hydrazine) on-orbit system
Batteries:	Two >3850 W-Hr capacity Li-Ion batteries
Mission Life:	15 years
Orbit:	43° West Longitude

Hybrid Payload

C-band

Repeater:	12 active transponders with 16-for-12 redundant TWTAs
Antenna:	2.3 m dual grid deployable reflector with corrugated feed horn assembly

Ku-band

Repeater:	18 active transponders with two groups of 12-for-9 TWTAs
Antenna:	2.3 m dual grid deployable transmit reflector; 0.9 m dual grid deck-mounted receive

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	October 5, 2007

The GEOStar™ Advantage

Orbital ATK's highly successful Geosynchronous Earth Orbit (GEO) communications satellites are based on the company's GEOStar spacecraft platform, which is able to accommodate all types of commercial communications payloads and is compatible with all major commercial launchers. The company's GEOStar product line includes the GEOStar-2 design, which is optimized for smaller satellite missions that can support up to 5.0 kilowatts of payload power. Orbital ATK has also developed the higher-power GEOStar-3 spacecraft design, delivering the next increment of payload power for applications between 5.0 and 8.0 kilowatts, allowing Orbital ATK to offer its innovative and reliable satellite design to the medium-class of communications satellites.

Mission Partners

Intelsat

Intelsat is a premier global provider of video and data services via satellite

Orbital ATK

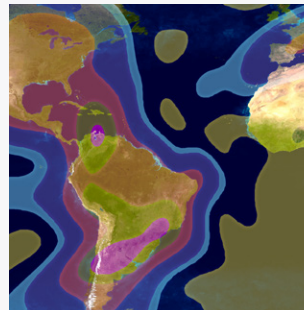
Prime contractor for Galaxy 12, 14 and 15; Intelsat 11, 15, 16, 18, 23 and 28; Horizons-2 for an Intelsat/SKY Perfect JSAT joint venture

Arianespace

Launch provider

Coverage Contour Maps

C-band Coverage Area



Ku-band Coverage Area

