

Intelsat 15

Ku-band Commercial Communications Satellite for Intelsat



Mission Description

The Intelsat 15 (IS-15) satellite manufactured for Intelsat replaced Intelsat 709 positioned at 85 degrees East Longitude. The high power Ku-band payload provides video and data services for the Middle East, Indian Ocean regions and Russia. Based on Orbital ATK's GEOSTAR-2™ spacecraft bus, IS-15 produces 4.6 kilowatts of payload power and features two 2.3 meter dual grid deployable reflectors as well as one 1.4 meter deck-mounted antenna.

GEOSTAR™ Satellites for Intelsat

Intelsat 15 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

FACTS AT A GLANCE

Coverage:

Middle East, Indian Ocean Region and Russia



Mission:

Ku-band video and data services

Customer:

Intelsat



Intelsat 15 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

Intelsat 15

Specifications

Spacecraft

Launch Mass:	2,550 kg (5,622 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 >4840 W-Hr capacity Li-Ion batteries
Mission Life:	15 years
Orbit:	85° East Longitude

Payload

Ku-band

Repeater:	22 active transponders with 30-for-22 redundant TWTAs
Antenna:	Two 2.3 m deployable dual grid reflectors; one 1.4 m deck-mounted

Launch

Launch Vehicle:	Zenit
Site:	Baikonur, Kazakhstan
Date:	November 30, 2009

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

Land Launch

Launch provider



Intelsat 15 was launched into orbit on a Zenit launch vehicle in 2009.