

Intelsat 16

Ku-band Commercial Communications Satellite for Intelsat



Mission Description

The Intelsat 16 (IS-16) satellite built for Intelsat provides Direct-To-Home (DTH) transponder capacity for DirecTV subsidiaries. IS-16 provides expansion capacity for SKY Mexico offering High Definition (HD) services and delivering news, sports and entertainment programming to its direct-to-home viewers. In addition, IS-16 is available to provide backup capacity for SKY Brazil. Located at 58 degrees West Longitude, the spacecraft features a high-power Ku-band payload, two 2.3 meter deployable reflectors and one 1.2 meter super-elliptical, deck mounted antenna.

GEOStar™ Satellites for Intelsat

Intelsat 16 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

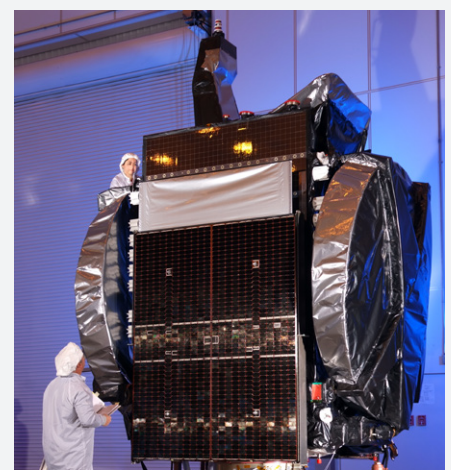
FACTS AT A GLANCE

Coverage:
The Americas



Mission:
Ku-band communications

Customer:
Intelsat



Intelsat 16 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

Intelsat 16

Specifications

Spacecraft

Launch Mass:	2,450 kg (5,401 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:	58° West Longitude

Hybrid Payload

Ku-band

Repeater:	24 active transponders with two groups of 16-for-12 redundant linearized TWTAs
Antenna:	Two 2.3 m dual grid deployable reflectors; one 0.9 m dual grid deck-mounted receive

Launch

Launch Vehicle:	Proton
Site:	Baikonur, Kazakhstan
Date:	February 11, 2010

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

International Launch Services

Launch provider

Coverage Contour Maps

Ku-band Coverage Area

