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 11 Northrop Grumman GEOStar communications satellites ordered by Intelsat.

- Galaxy 12
- Galaxy 14
- Galaxy 15
- Galaxy 30
- Horizons-2
- Intelsat 11
- Intelsat 15
- Intelsat 16
- Intelsat 18
- Intelsat 23
- Intelsat 28

**Coverage**
The Americas

**Mission**
Ku-band communications

**Customer**
Intelsat
**Mission Partners**

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

**International Launch Services**
Launch provider

**Northrop Grumman**
Prime contractor for Galaxy 12, 14, 15 and 30; Intelsat 11, 15, 16, 18, 23 and 28; Horizons-2 for an Intelsat/SKY Perfect JSAT joint venture

**Coverage Contour Maps**
Ku-band Coverage Area

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**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

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**The GEOStar™ Advantage**

Northrop Grumman’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. Northrop Grumman 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 Northrop Grumman to offer its innovative and reliable satellite design to the medium-class of communications satellites.

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Intelsat 16 in Northrop Grumman’s Dulles, Virginia satellite manufacturing facility