

Intelsat 23

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



Mission Description

Orbital ATK built the Intelsat 23 (IS-23) GEO communications satellite for Intelsat. IS-23 generates 4.8 kilowatts of electrical payload power and carries 15 active Ku-band and 24 active C-band transponders. The spacecraft provides communications services for the Americas, the Caribbean, Western Europe, Africa and selected islands of the Pacific and Atlantic oceans. Designed for a useful life of at least 15 years, the IS-23 satellite is located in orbit at 307 degrees East Longitude, and is the 10th Orbital ATK-built geosynchronous communications satellite in the Intelsat fleet.

GEOStar™ Satellites for Intelsat

Intelsat 23 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, the Caribbean, Western Europe, Africa and selected islands of the Pacific and Atlantic oceans

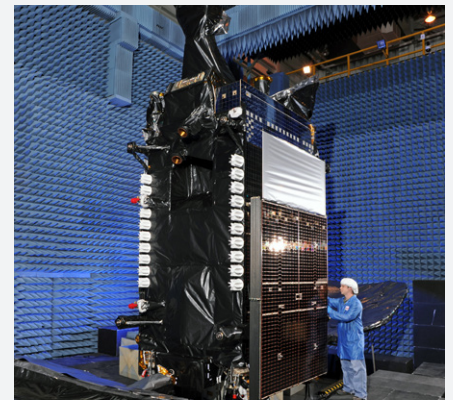


Mission:

C- and Ku-band communications

Customer:

Intelsat



Intelsat 23 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

Intelsat 23

Specifications

Spacecraft

Launch Mass:	3,200 kg (7,055 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:	307° East Longitude

Hybrid Payload

C-band

Repeater:	24 active transponders with two groups of 16-for-12 redundant TWTAs
Antenna:	2.5 x 2.7 m single shell super-elliptical deployable reflector; 1.3 x 1.65 m single shell super-elliptical deck-mounted

Ku-band

Repeater:	15 active transponders with 19-for-15 TWTAs
Antenna:	2.5 x 2.7 m single shell super-elliptical deployable reflector

Launch

Launch Vehicle:	Proton
Site:	Baikonur, Kazakhstan
Date:	October 14, 2012

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

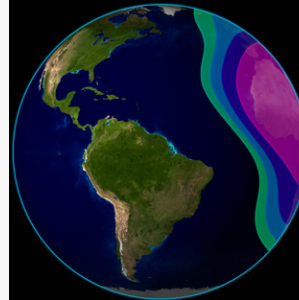
International Launch Services

Launch provider

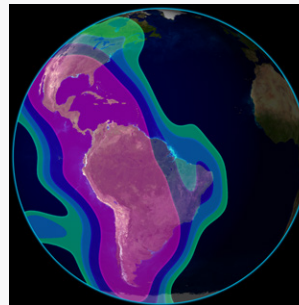
Coverage Contour Maps

C-band Coverage Areas

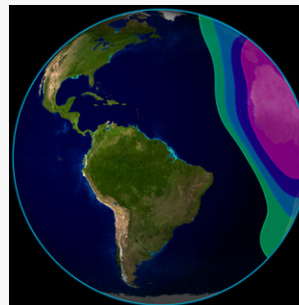
Eastern Hemisphere 3.7 GHz



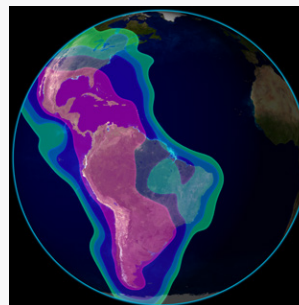
Western Hemisphere 3.7 GHz



Eastern Hemisphere 5.925 GHz

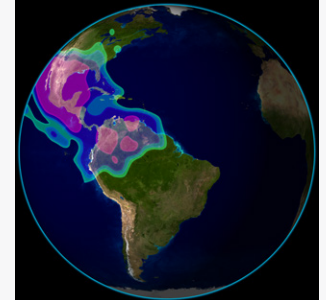


Western Hemisphere 5.925 GHz

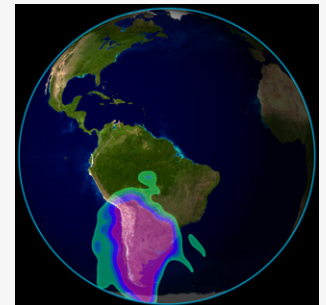


Ku-band Coverage Areas

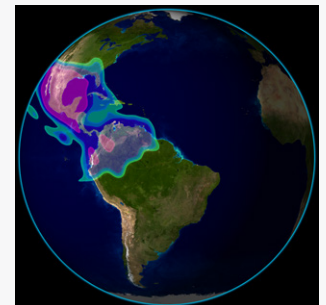
F1 11.7 GHz HP



F2 11.7 GHz HP



F1 14.0 GHz HP



F2 14.0 GHz HP

