

Amazonas 4A

Ku-band Commercial Communications Satellite



Communications

Mission Description

The Amazonas 4A spacecraft, built for Hispasat, features 24 Ku-band active transponders to provide voice, wireless backhaul, internet, and media applications services to South America from an orbital location at 61 degrees West Longitude. The satellite is based on Orbital ATK's highly successful GEOStar™-2 spacecraft bus and features two 2.5 x 2.7 meter single shell super elliptical deployable reflectors.

The contract for Amazonas 4A also includes an option for a second spacecraft to be based on a higher power Orbital ATK spacecraft bus.

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.

FACTS AT A GLANCE

Coverage:

South America



Mission:

Ku-band communications

Customer:

Hispasat



Amazonas 4A in Orbital ATK's Dulles, Virginia satellite manufacturing facility

Amazonas 4A

Specifications

Spacecraft

Launch Mass:	3,000 kg (6,614 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 >5053 W-Hr capacity Li-Ion batteries
Mission Life:	15 years
Orbit:	61° West Longitude

Payload

Ku-band

Repeater:	24 active transponders with two groups of 15-for-12 LCTWTAs
Antenna:	2.5 x 2.7 m single shell super-elliptical deployable reflectors

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	March 22, 2014

Mission Partners

Hispasat

Hispasat is an industry leader in technology innovation

Orbital ATK

Prime contractor for Amazonas 4A

Arianespace

Launch provider

Coverage Contour Maps

Ku-band Rx



Ku-band Tx

