

HYLAS 2

Ka-band Commercial Communications Satellite



Mission Description

The HYLAS 2 satellite carries 24 active Ka-band user beams and six gateway beams, and produces approximately 5.0 kilowatts of payload electrical power. The Ka-band spot beams provide two-way communications services to facilitate high-speed delivery of data to end-user applications such as corporate networking, broadband Internet access, business continuity services and video distribution. Using the HYLAS 2 spacecraft, Avanti provides its data and video services to Eastern and Southern Africa, Eastern Europe and the Middle East. In addition, the spacecraft is equipped with a steerable spot beam, also operating at Ka-band, which provides coverage anywhere on Earth that is visible to the satellite.

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:

Europe, the Middle East and Africa

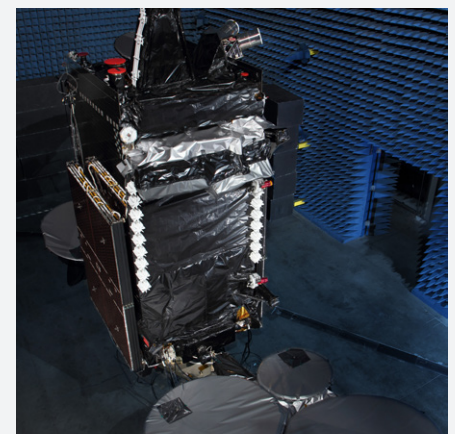


Mission:

Ka-band Fixed Satellite Services (FSS) communications

Customer:

Avanti Communications



HYLAS 2 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

HYLAS 2

Specifications

Spacecraft

Launch Mass:	3,325 kg (7,330 lb.)
Solar Arrays:	Four panels per array, UTJ Gallium Arsenide cells
Stabilization:	3-axis stabilized
Propulsion:	Monopropellant (hydrazine) on-orbit system
Batteries:	Two 5140 W-Hr capacity Li-Ion batteries (BOL)
Mission Life:	15 years (fueled for >16 years)

Payload

Forward Repeater:	24 active transponders with 130 W TWTAs
Return Repeater:	Six active transponders with 90 W TWTAs
Antenna:	Two deployable reflectors with six antenna surfaces; one steerable deck-mounted

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	August 2, 2012

Mission Partners

Avanti Communications

The United Kingdom's only Fixed Satellite Services (FSS) operator

Orbital ATK

Prime contractor for the HYLAS 2 satellite