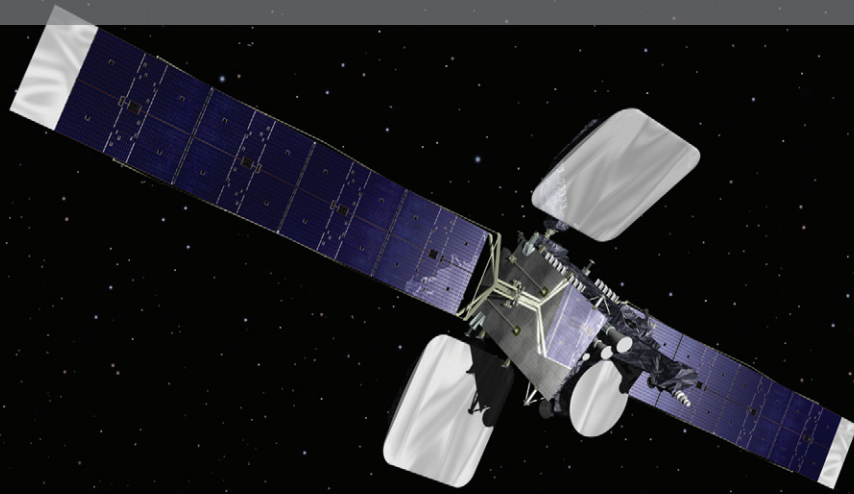


Intelsat 28

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



Mission Description

The Intelsat 28 spacecraft (previously named Intelsat New Dawn), built for Intelsat and Convergence Partners, carries 16 Ku- and 14 C-band active transponders to provide voice, wireless backhaul, internet, and media applications services. The satellite, located at 32.9 degrees East Longitude, provides communications services to Europe, the Middle East, Africa and Sub-Saharan regions.

GEOStar™ Satellites for Intelsat

Intelsat 28 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:

Europe, the Middle East, Africa and Sub-Saharan regions



Mission:

C- and Ku-band communications

Customer:

Intelsat
Convergence Partners



Intelsat 28 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

Intelsat 28

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 >4840 W-Hr capacity Li-Ion batteries
Mission Life:	15 years
Orbit:	32.9° East Longitude

Hybrid Payload

C-band

Repeater:	14 active transponders with two groups of 10-for-7 redundant TWTAs
Antenna:	2.5 x 2.7 m single shell super-elliptical deployable reflector

Ku-band

Repeater:	16 active transponders with two groups of 11-for-8 TWTAs
Antenna:	2.5 x 2.7 m single shell deployable reflector

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	April 22, 2011

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

Convergence Partners

Convergence Partners is a South African-based investment company focused on the telecommunications, media and technology sector, predominantly in Africa and the Middle East.

Orbital ATK

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

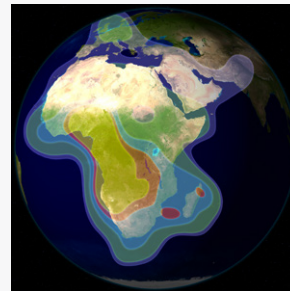
Arianespace

Launch provider

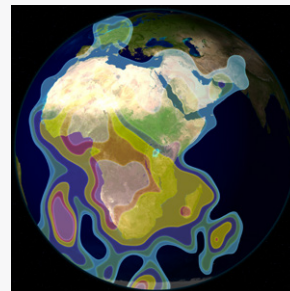
Coverage Contour Maps

C-band Coverage Areas

EIRP



GT



Ku-band Coverage Areas

EIRP



GT

