

# Intelsat 18

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



## Mission Description

The Intelsat 18 satellite built for Intelsat carries a hybrid payload and is located at an orbital slot at 180 degrees East Longitude. The satellite's C-band payload serves Eastern Asia, the Western Pacific and North America. The Ku-band payload serves North America, French Polynesia, Cook Islands, Australia, New Zealand, New Caledonia, Vanatu, Fiji, Tonga, Samoa and other islands.

## GEOStar™ Satellites for Intelsat

Intelsat 18 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:

Asia Pacific Region



### Mission:

C- and Ku-band communications

### Customer:

Intelsat



Intelsat 18 in Orbital ATK's Dulles, Virginia satellite manufacturing facility

# Intelsat 18

## 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:	180° 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; 1.45 m deck-mounted

#### Ku-band

Repeater:	12 active transponders with two groups of 8-for-6 TWTAs
Antenna:	2.5 x 2.7 m single shell deployable reflector

### Launch

Launch Vehicle:	Zenit
Site:	Baikonur, Kazakhstan
Date:	October 5, 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

### 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

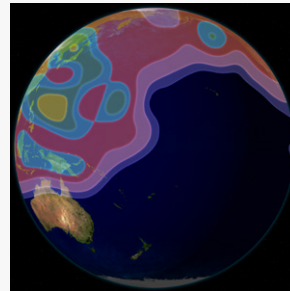
### Launch Launch

Launch provider

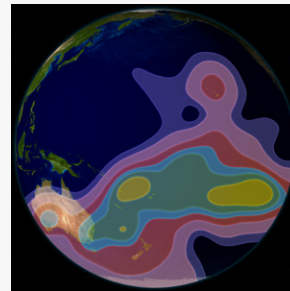
## Coverage Contour Maps

### C-band Coverage Areas

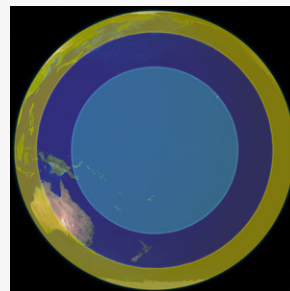
#### Northern Hemisphere



#### Southern Hemisphere

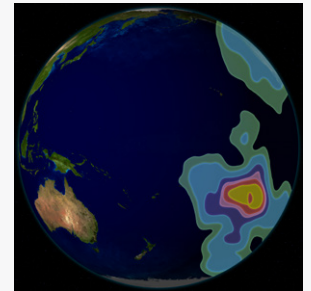


#### Global

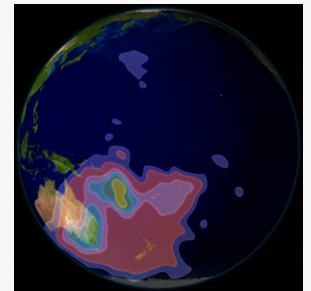


### Ku-band Coverage Areas

#### F1



#### F2



#### U.S. West

