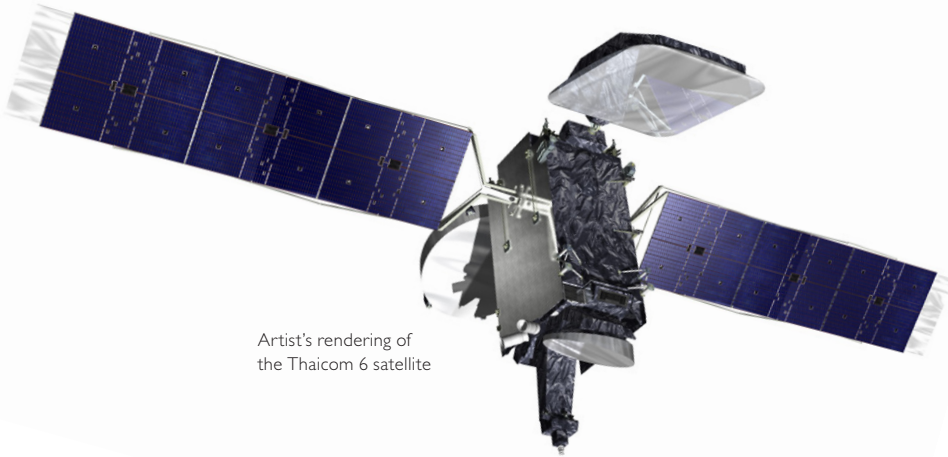




# Thaicom 6

Ku-band/C-band Hybrid Satellite for Thaicom PLC.



Artist's rendering of the Thaicom 6 satellite

## Mission Description

Orbital Sciences Corporation was selected by Thaicom PLC to build their sixth satellite, Thaicom 6. The Thaicom 6 Satellite design is based on Orbital's highly successful, flight-proven, GeoStar-2™ satellite platform, and will be manufactured and tested at Orbital's state-of-the-art manufacturing facility in Dulles, VA.

Thaicom 6 will be located at 78.5 degrees East Longitude, and carry a hybrid Ku- and C-band payload that will generate approximately 3.7 kilowatts of payload power. The Ku-band payload will be comprised of eight active transponders providing services to Thailand, Laos, Cambodia, and Myanmar. The C-band payload will feature 12 active C-band transponders providing services via a regional beam to Southeast Asia, and six active C-band transponders providing services via a south Africa beam to southern Africa and Madagascar.

## QUICK FACTS:



**Coverage:**  
Southeast Asia, and Southern Africa including Madagascar

**Mission:**  
Ku- and C-band communications

**Customer:**  
Thaicom Public Limited Company



Thaicom 6 is based on Orbital's GeoStar-2 satellite platform, and will undergo integration and testing at Orbital's Satellite Manufacturing Facility in Dulles, VA

# Thaicom 6

## Specifications

### Spacecraft

Launch Mass:	< 3,325 kg (7,330 lb.)
Payload Power:	3.7 kW
Solar Arrays:	Three panels per array, UTJ Gallium Arsenide cells
Stabilization:	3-axis stabilized; zero momentum
Propulsion:	Liquid bi-propellant transfer orbit system; monopropellant (hydrazine) on-orbit system
Batteries:	Lithium Ion
Mission Life:	≥ 15 years
Orbit:	78.5 degrees East Longitude

### Hybrid Payload

#### C-band

C1 Repeater:	12 active C-band transponders
C1 Antenna:	2.3m dual gridded deployable reflector antenna
C2 Repeater:	6 active C-band transponders
C2 Antenna:	1.4m dual gridded reflector Earth deck mounted antenna

#### Ku-band

Repeater:	8 active Ku-band transponders
Antenna:	2.5m x 2.7m single offset super-elliptical deployable reflector antenna

### Launch

Launch Vehicle:	Falcon 9
Site:	Cape Canaveral, Florida
Date:	2013

## The STAR™ Advantage

Orbital'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 STAR product line includes the STAR 2.4 design, which is optimized for smaller satellite missions that can support up to 5.0 kW of payload power. Orbital has also developed the higher-power STAR 2.7 spacecraft design, delivering the next increment of payload power for applications between 5.0 and 7.5 kW, allowing Orbital to offer its innovative and reliable satellite design to the medium-class of communications satellites.

## Mission Partners

Thaicom Public Limited Company

Orbital Sciences Corporation

Design, integration and test of the Thaicom 6 Satellite

## Thaicom 6 Coverage Contour Maps

### C1 Beam Coverage Contour Map



### C2 Beam Coverage Contour Map



### Ku-band Coverage Contour Map

