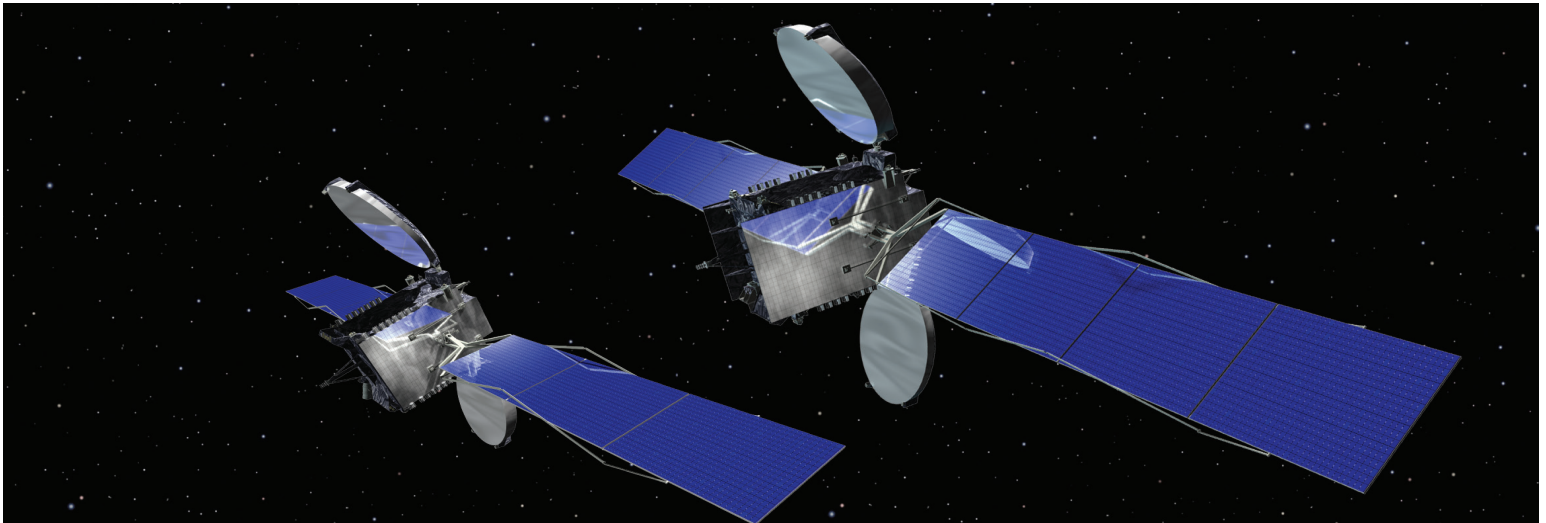


Optus D1 and D2

Ku-band Commercial Communications Satellite

FACT SHEET



Mission Description

Built for Australia-based Optus Networks Pty Limited, the Optus D-Series satellites provide Ku-band fixed communications and direct television broadcasting services to Australia and New Zealand. The Orbital ATK-built satellites satisfy Optus' need to replace aging on-orbit spacecraft as well as satisfy higher than anticipated demand for access to their C1 satellite. D1 was launched in October 2006 and replaced the Optus B1 satellite at 160 degrees East Longitude; D2 was launched in October 2007 and replaced the Optus B3 satellite at 152 degrees East Longitude.

Spacecraft

The D-Series satellites are based on Orbital ATK's flight-proven GEOSTar™-2 bus. Each satellite carries 24 active Ku-band transponders on a platform that is ideal for telephony, data and broadcasting applications. Both spacecraft generate approximately 3.8 kilowatts of payload power.

FACTS AT A GLANCE

Coverage:

Australia and New Zealand



Mission:

Ku-band fixed communications and direct television

Customer:

Optus Networks, Pty Limited

Optus D1 and D2

Specifications

Optus D1

Spacecraft

Launch Mass:	2,300 kg (5,060 lb.)
Solar Arrays:	Three 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 4750 W-Hr capacity Li-Ion batteries (BOL)
Mission Life:	15+ years
Orbit:	160° East Longitude

Payload

Ku-band

Repeater:	24 active transponders with 20-for-16 150 W TWTAs; 10-for-8 44 W TWTAs
TWTA Power:	3.8 kW
Antenna:	Two 2.3 m deployable dual-shell grid shaped reflectors

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	October 13, 2006

Optus D2

Spacecraft

Launch Mass:	2,375 kg (5,225 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 4750 W-Hr capacity Li-Ion batteries (BOL)
Mission Life:	15+ years
Orbit:	152° East Longitude

Payload

Ku-band

Repeater:	24 active transponders with 20-for-16 125 W TWTAs; 10-for-8 44 W TWTAs
TWTA Power:	4.0 kW
Antenna:	Two 2.3 m deployable dual-shell grid shaped reflectors

Launch

Launch Vehicle:	Ariane 5
Site:	Kourou, French Guiana
Date:	October 5, 2007

Mission Partners

Optus of Australia

A leader in providing integrated communications in Australia

Orbital ATK

Prime contractor for three Optus Ku-band satellites

Arianespace

Launch provider



Optus D1 was launched aboard an Ariane 5 rocket in 2006.



Optus D2 was launched aboard an Ariane 5 rocket in 2007.