Built for Australia-based Optus Networks Pty Limited, Optus D3 provides Ku-band fixed communications and direct television broadcasting services to Australia and New Zealand. The Northrop Grumman-built satellite is providing further market expansion at the same orbital slot as the Optus C1 satellite which was launched in 2003 and is located at 156 degrees East Longitude. Optus D3 carries 24 active Ku-band transponders and generates approximately 5.0 kilowatts of payload power.

**The GEOStar™ Advantage**
Northrop Grumman’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. Northrop Grumman 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 Northrop Grumman to offer its innovative and reliable satellite design to the medium-class of communications satellites.

**Coverage**
Australia and New Zealand

**Mission**
Ku-band fixed communications and direct television

**Customer**
Optus Networks, Pty Limited
**Mission Partners**

**Optus of Australia**
A leader in providing integrated communications in Australia

**Arianespace**
Launch provider

**Northrop Grumman**
Prime contractor for three Optus Ku-band satellites

**Coverage Contour Maps**

*Australia Antenna Pattern*

*New Zealand Antenna Pattern*

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**Specifications**

**Spacecraft**
- **Launch Mass:** 2,500 kg (5,500 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 5140 W-Hr capacity Li-Ion batteries (BOL)
- **Mission Life:** 15 years
- **Orbit:** 156° East Longitude

**Payload**

*Ku-band*
- **Repeater:** 24 active transponders with 28-for-24 125 W TWTAs (primary transponders); 10-for-8 44 W TWTAs (backup transponders)
- **Payload Power:** 5.0 kW
- **Antenna:** Two 2.3 m dual grid shaped deployable reflectors

**Launch**
- **Launch Vehicle:** Ariane 5
- **Site:** Kourou, French Guiana
- **Date:** August 21, 2009

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Optus D3 in Northrop Grumman's Dulles, Virginia satellite manufacturing facility