



[← Back to Satellite Fleet \(/about/network/satellite/fleet\)](/about/network/satellite/fleet)

Optus C1

An Australian hotbird

The world's largest hybrid commercial and military satellite was jointly launched in 2003 by Optus and the Australian Defence Forces. The Optus C1 is the Australian hotbird with 24 commercial Ku-band transponders. It sits at 156°E.



In 2003, Optus successfully launched the world's largest hybrid commercial and military communications satellite Optus C1, together with the Australian Defence Forces. Optus C1 is the Australian hotbird with twenty four commercial Ku-band

transponders operating in beams covering Australia, New Zealand, the nearby offshore islands, Papua New Guinea, Hawaii and South East Asia. Optus C1 carries subscription TV services and Aurora Free-to-Air radio and television services to remote areas in Australia.

Technical Information (/content/dam/optus/documents/about-us/our-network/Optus_C1_Payload.pdf)

Satellite

Satellite Type:	Loral FS1300
Launch Mass:	4,800 kg
Mass in Orbit:	2,000 kg
Stablisation:	3-Axis
Dimensions:	8.2 metres high x 24.9 metres with solar arrays deployed

Transponders

Operating Bands:	Ku FSS + Defence
Uplink Frequencies:	Ku FSS: 14.0 - 14.5 GHz
Downlink Frequencies:	Ku FSS: 12.25 - 12.75 GHz
Number of Transponders:	Ku-Band: 24 @ 110 watts
Bandwidth:	Ku-Band: 8 @ 72 MHz, 16 @ 36 MHz
Polarisation:	Linear (Ku-Band)

Performance

EIRP:	Ku: Australia/New Zealand: 40 to 51 dBW Asia: 45 to 53 dBW
G/T:	Ku: Australia/New Zealand: -4 to +6 dB/K Asia: 0 to +8 dB/K

SFD: -78 to -98 dBW/m²

Solar Array Power: 10.6 kilowatts

Telemetry: Ku-Band

Command: Ku-Band

-

-