The Star One C3 satellite, manufactured for Star One, carries a hybrid payload. The satellite's C-band payload serves South America. The Ku-band payload serves Brazil and other areas of South America.

**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**

Brazil, The Andes and South America

**Mission**

C- and Ku-band communications

**Customer**

Star One
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

Hybrid Payload

C-band
Repeater: 28 active transponders with two 16-for-14 TWTA interconnected rings
TWTA Power: 48 W RF
Antenna: 2.3 m dual grid deployable reflector

Ku-band
Repeater: 16 active transponders with two 10-for-8 TWTA rings
TWTA Power: 140 W RF
Antenna: 2.3 m dual grid deployable reflector; 1.4 m deck-mounted

Launch
Launch Vehicle: Ariane 5
Site: Kourou, French Guiana
Date: November 10, 2012

Mission Partners

Northrop Grumman
Prime contractor

Star One
An Embratel Company, Star One is Brazil’s leading satellite communications service provider

Arianespace
Launch provider

Coverage Contour Maps

C-band Coverage

Ku-band Brazilian Coverage

Ku-band Andean Coverage