The MEASAT-3a satellite was developed and built for MEASAT Satellite Systems of Kuala Lumpur, Malaysia. The satellite carries 12 Ku-band and 12 C-band active transponders along with three antennas. MEASAT-3a serves C-band markets throughout the region with a global beam, and Ku-band beams serve direct-to-home broadcasting markets in Malaysia and Indonesia. The satellite is located at an orbital slot at 91.5 degrees East Longitude over Southeast Asia and generates approximately 3.6 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**

Asia, the Middle East and Africa

**Mission**

Ku-band Direct-To-Home (DTH) television broadcasting and C-band Fixed Satellite Services (FSS)

**Customer**

MEASAT Satellite Systems
**Specifications**

**Spacecraft**
- Launch Mass: 2,417 kg (4,448 lb.)
- Solar Arrays: Three panels per array, UTJ Gallium Arsenide cells
- Stabilization: 3-axis stabilized
- Propulsion: Monopropellant (hydrazine) on-orbit system
- Batteries: Two 4248 W-Hr
- Mission Life: 15 years
- Orbit: 91.5° East Longitude

**Payload**

**C-band**
- Repeater: 12 active transponders with 15-for-12 linearized 60 W TWTAs
- TWTA Power: 60 W RF
- Antenna: 2.3 m dual grid shaped deployable reflector; 1.2 m deck-mounted

**Ku-band**
- Repeater: 12 active transponders with 15-for-12 linearized TWTAs
- TWTA Power: 120 W RF
- Antenna: 2.3 m dual grid shaped deployable reflector

**Launch**
- Launch Vehicle: Zenit
- Site: Baikonur, Kazakhstan
- Date: June 21, 2009

**Mission Partners**

**MEASAT Satellite Systems**
- One of Southeast Asia's leading satellite communications providers

**Land Launch**
- Launch provider

**Northrop Grumman**
- Prime contractor for MEASAT-3a

**Coverage Contour Maps**

MLA Contours

INS Contours

GWI Contours

MEASAT-3a undergoes testing in Northrop Grumman's Dulles, Virginia satellite manufacturing facility