



## Technical Profile

# AMOS-3

### General Specifications

- Orbital location ..... 4° West
- Frequency bands ..... Ku, Ka
- Number of 36 MHz Ku-band segments ..... 26
- Number of 450 MHz Ka-band segments ..... 2
- Service areas
  - Fixed beams ..... Ku-band - Europe, Middle East, US East Coast  
Ka-band - Middle East
  - Steerable beams .. Ku and Ka - Global steering range
- Antenna polarization .... Ku - Linear  
Ka - Circular
- Launch date ..... April 2008
- Expected Service Life .. 17 years

In April 2008 **AMOS-3** was launched to the **4°W** orbital position where it joined the Hot-Spot created by AMOS-1 and AMOS-2.

**AMOS-3**, which replaced AMOS-1 in orbit, enhances Spacecom's portfolio with additional capacity, expanded coverage areas and single-hop cross-Atlantic connectivity to the US East Coast.

Furthermore, **AMOS-3** offers advanced capabilities and new features such as **Ka-band** transponders, and **steerable beams** with global steering range in both Ka-band and Ku-band.

**AMOS-3** fixed beams include three Ku-band beams covering Europe, the Middle East and the US East Coast, and one fixed Ka-band beam with high power coverage over the Middle East.

**AMOS-3** powerful transponders enhance Spacecom's existing service offering supporting a full range of satcom services, including Direct-To-Home (DTH), video distribution, VSAT communications and broadband Internet.

The co-location of the **AMOS** satellites at the **4°W** orbital location means in-orbit satellite redundancy, enabling backup capabilities and the highest service reliability.

## Parameters

Number of 36 MHz segments ..... up to 14

EIRP at beam center ..... 60 dBW

G/T at beam center ..... 14 dB/K°

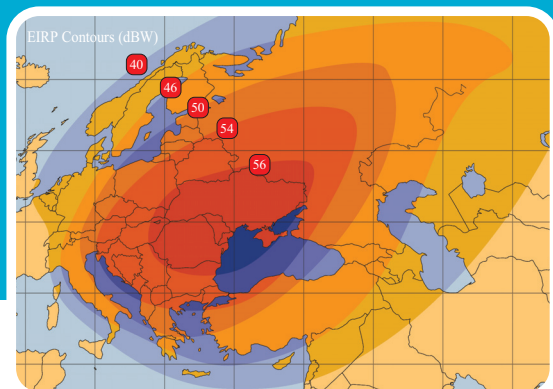
Uplink frequencies ..... 12.75 to 13.25; 13.75 to 14.5 GHz

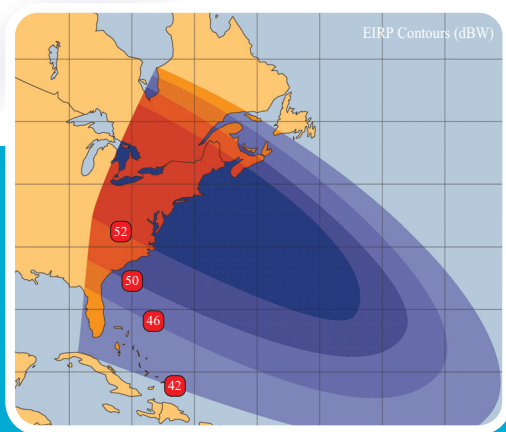
Downlink frequencies ..... 10.7 to 11.70; 12.50 to 12.75 GHz

Uplink polarization ..... Vertical or Horizontal

Downlink polarization ..... Vertical or Horizontal

## Europe - Fixed Ku Beam





## North America - Fixed Ku Beam

### Parameters

Number of 36 MHz segments - - - - - up to 6	Downlink frequencies - - - - - 10.70 to 11.70 GHz
EIRP at beam center - - - - - 54 dBW	Uplink polarization - - - - - Horizontal
G/T at beam center - - - - - 13 dB/K°	Downlink polarization - - - - - Horizontal
Uplink frequencies - - - - - 13.75 to 14.08 GHz	

## Parameters

Number of 36 MHz segments ---- up to 22

EIRP at beam center ----- 60 dBW

G/T at beam center ----- 14 dB/K°

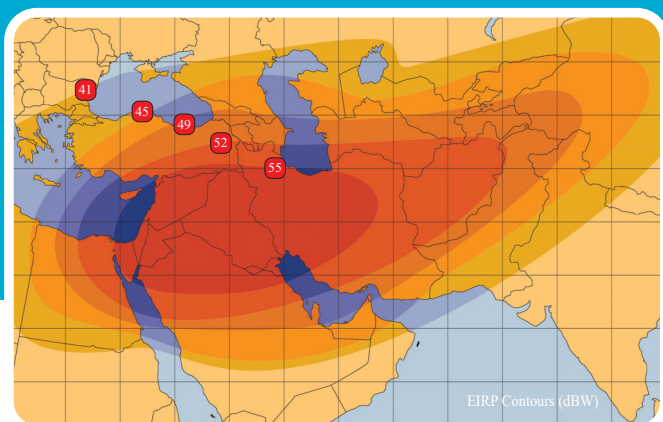
Uplink frequencies ----- 12.75 to 13.25; 13.75 to 14.5 GHz

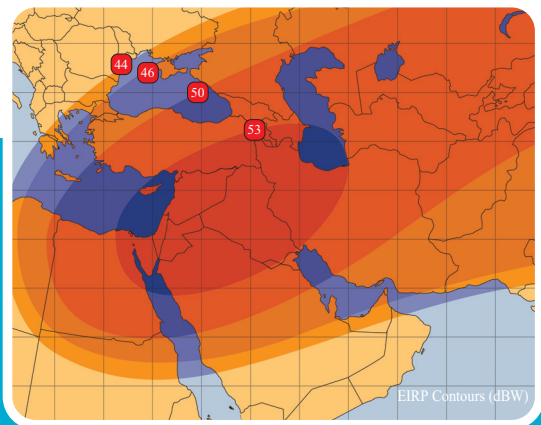
Downlink frequencies ----- 10.70 to 11.70; 12.50 to 12.75 GHz

Uplink polarization ----- Vertical or Horizontal

Downlink polarization ----- Vertical or Horizontal

## Middle East - Fixed Ku Beam





## Middle East - Fixed Ka Beam

### Parameters

Number of channels .....	3	Uplink frequencies .....	28.95 to 30.00 GHz
Bandwidth .....	up to 450 MHz per channel	Downlink frequencies .....	19.325 to 20.375 GHz
EIRP at beam center .....	54 dBW	Uplink polarization .....	LHCP
G/T at beam center .....	11 dB/K°	Downlink polarization .....	RHCP

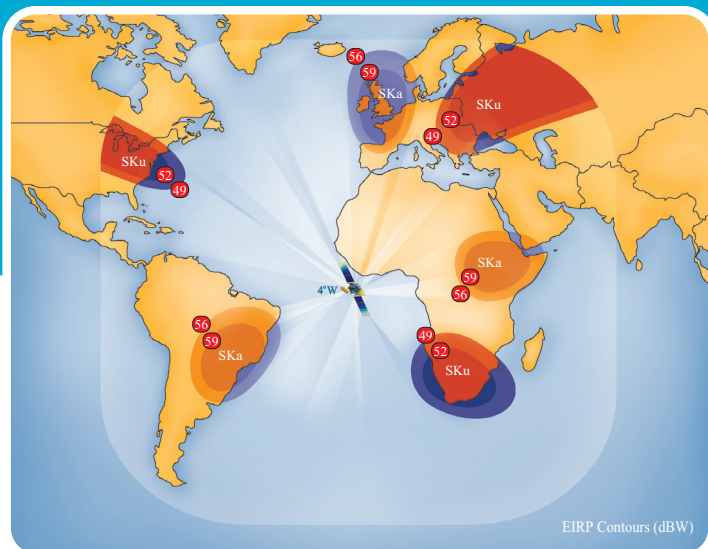
## Steerable Ku Beam Parameters

Number of channels .....	3	Uplink frequencies .....	13.99 to 14.25 GHz
Bandwidth .....	up to 72 MHz per channel	Downlink frequencies .....	11.12 to 11.45 GHz
EIRP at beam center .....	54 dBW	Uplink polarization .....	Vertical
G/T at beam center .....	10 dB/K°	Downlink polarization .....	Vertical or Horizontal
Steering Range .....	+/- 8°		

## Steerable Ka Beam Parameters

Number of channels .....	3	Uplink frequencies .....	28.95 to 30.00 GHz
Bandwidth .....	up to 450 MHz per channel	Downlink frequencies .....	19.325 to 20.375 GHz
EIRP at beam center .....	60 dBW	Uplink polarization .....	LHCP
G/T at beam center .....	17 dB/K°	Downlink polarization .....	RHCP
Steering Range .....	+/- 8°		

# Global Ka-band & Ku-band Steerable Beams





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