

ASTRA 1G - 19.2° EAST



PUBLISHED | FEBRUARY 2003



Direct-to-Home services

The ASTRA 1G satellite is located at 19.2° East, ASTRA's prime orbital position for Direct-to-Home services, providing capacity mainly for the transmission of broadcast and broadband multimedia services to consumer audiences in continental Europe.

SATELLITE INFORMATION

Satellite launch information

Launch date: 02.12.1997
 Launch vehicle: Proton D1-e
 Launch site: Baikonur, Kazakhstan
 Launch mass: 3379 kg

Satellite orbital information

Satellite manufacturer: Hughes
 Orbital location: 19.2° East
 Stabilization system: 3 axis type
 Expected lifetime: 15 years
 Total power consumption: 6600 Watts

Satellite transponder information

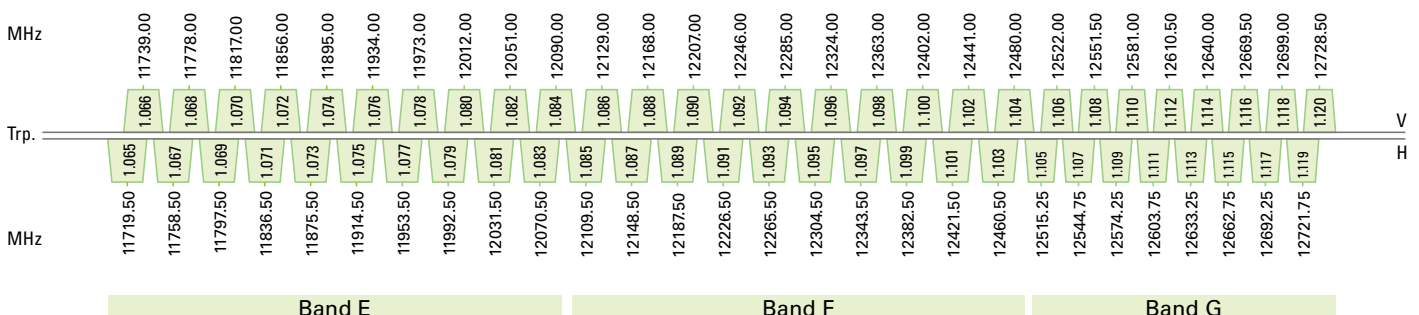
Transponder capacity: 20
 TWTA output power: 98 Watts
 EIRP: 51 dBW
 All transponders are eclipse protected
 Transponder bandwidth: 26 MHz in FSS
 33 MHz in BSS

CHANNEL CAPACITY

Total: 56 channels

11.70 - 12.10 GHz: 20 channels (Band E) • 12.10 - 12.50 GHz: 20 channels (Band F) • 12.50 - 12.75 GHz: 16 channels (Band G)

Channel Number Allocation and Downlink Centre Frequencies

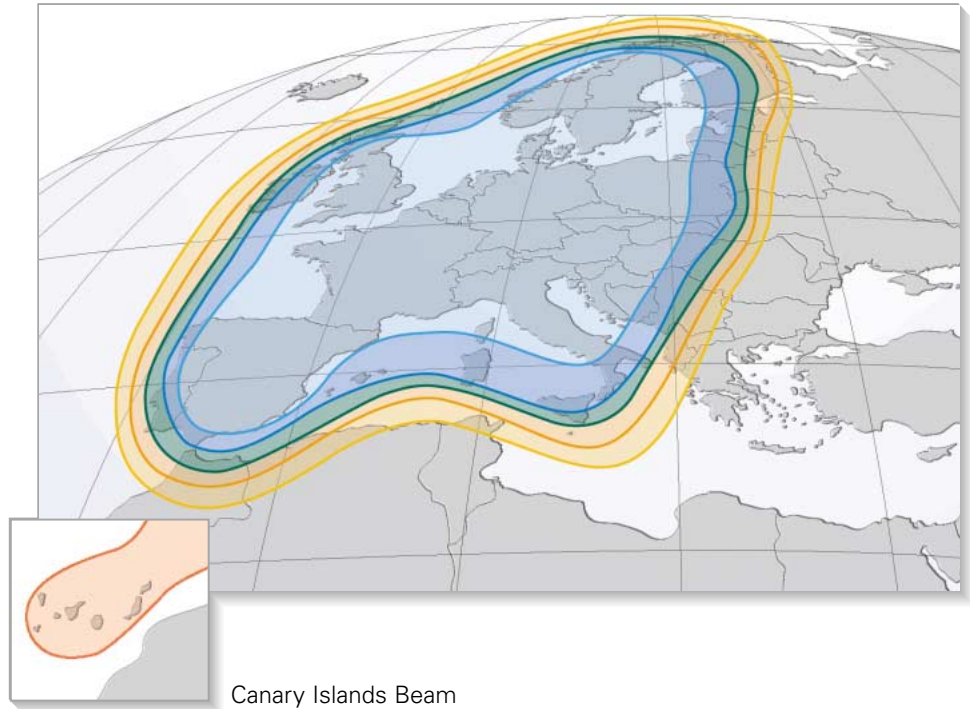


ASTRA 1G FOOTPRINT



Typical dish sizes: 50 cm 60 cm 75 cm 90 cm 100 cm 120 cm

Horizontal and Vertical Polarization



ASTRA ORBITAL POSITIONS AND BACK-UP – SAFEGUARDING REVENUE

By co-locating satellites at one orbital position, ASTRA can offer easy ways of expanding service ranges and highest transmission security. The key advantage is that audiences can use the same direct-to-home reception equipment when broadcasters and broadband

service providers extend their services at the same orbital position. The ASTRA satellite system through its co-located satellites at prime orbital positions also has the strength to provide a unique form of in-orbit back-up. If for any reason, a transponder is switched off, a back-up

transponder on the same satellite or a co-located satellite can be immediately activated. The back-up system can therefore guarantee high operational security and continuity of service for both our customers and the end consumer.

Freq. (GHz)	10.70	10.95	11.20	11.45	11.70	12.10	12.50	12.75	29.50	30.00
	Band D	Band C	Band A	Band B	Band E	Band F	Band G		Ka Band	
ASTRA 1B				✓						
ASTRA 1C		✓	✓							
ASTRA 1E	✓	✓		✓	✓					
ASTRA 1F			✓		✓	✓				
ASTRA 1G					✓	✓	✓	✓		
ASTRA 1H					✓	✓	✓	✓		
ASTRA 2C	✓	✓			✓	✓			✓	
	Low Band (64 transponders)				High Band (56 transponders)			Ka Band (2 transponders)		