



HYLAS 1 is Avanti's first broadband satellite and uses the latest Ka-band technology to deliver high speed, two-way data services across Europe. It has a unique flexible payload which enables Avanti to change the bandwidth of its 8 Ka-band beams, whilst in orbit, to maximise satellite efficiency. HYLAS 1 is complemented by a Ku-band broadcast capability.

HYLAS 1 Applications:

- Broadband Internet access
- Resilient high-speed corporate data networks
- Remote site telemetry
- IP and Interactive regional TV
- GSM and mobile data backhaul
- Broadcast
- Business Internet Continuity

Customer Advantages:

- 4 times more powerful than traditional Ku-band satellites
- Low operating costs for bandwidth and VSAT hardware
- Virtual Network Operator (VNO) and bandwidth packages available
- Full management of services through OSS

HYLAS 1

Satellite Specifications

Orbital Location: 33.5° W Lift Off Mass: 2300 Kg

Life: 15 years

Payload Power: >2.0 kW Capacity: up to 3 GHz



Ka-band Broadband Payload

Uplink Frequency Range

Downlink Frequency Range

Forward	27.5 - 29.5 GHz	Forward	18.1 - 19.7 GHz
Return	29.5 - 30.0 GHz	Return	19.7 - 20.2 GHz
Active Forward Transponders	8	Active Return Transponders	2
Forward Channel Bandwidth	250 MHz per beam	Return Channel Bandwidth	120 MHz per beam
EIRP	62 dBW at beam centre	Polarisation	Circular

Ku-band Broadcast Payload

Uplink Frequency Range	17.3 - 18.1 GHz	Downlink Frequency Range	11.7 - 12.5 GHz
Active Transponders	Multiple	Nominal Transponder Bandwidth	33 MHz
EIRP	54dBW at beam centre	Polarisation	Linear

The Ka-band earth stations for HYLAS 1 are located at Goonhilly and Lands End, Cornwall UK.

For further information:

Call: +44 (0)20 7749 1666

Email: marketinggroup@avantiplc.com

Visit: www.avantiplc.com



About Avanti

Avanti sells satellite broadband services to telecommunications companies that then supply residential, enterprise and government users. HYLAS 1, Avanti's first satellite, is due for launch in 2010 and the second, HYLAS 2, will launch in 2012. The market for 2Mb satellite broadband products across Europe, the Middle East and Africa is estimated at more than 100 million homes and businesses. Avanti Communications Group plc is listed on the London Stock Exchange.