

-  Ka-band coverage
-  Ku-band coverage



**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



HYLAS 1

### KA-BAND BROADBAND PAYLOAD

#### Uplink Frequency Range

Forward	27.5 - 29.5 GHz	Forward	19.7 - 20.2 GHz
Return	29.5 - 30.0 GHz	Return	18.1 - 19.7 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.



#### ABOUT AVANTI

Avanti Communications Group plc is Europe's most innovative satellite operator. We launched our first Ka-band satellite, HYLAS 1, on 26 November 2010 to provide bandwidth, broadband and business continuity services through our partner network across Europe. HYLAS 2, our second Ka-band satellite, launched on 2 August 2012 and extends our coverage to the Middle East and Africa. We continue to pioneer the development of satellite technology to make it practical and affordable for new and existing markets.

### FOR FURTHER INFORMATION

Avanti Communications Group plc

74 Rivington Street, London EC2A 3AY · phone: +44 (0)20 7749 1666 · email: [marketinggroup@avantiplc.com](mailto:marketinggroup@avantiplc.com) · [www.avantiplc.com](http://www.avantiplc.com)