Data Sheet

Universal Space Mesh

- USM-ATLAS16 -



RF-reflective mesh "Made in Germany" for deployable or rigid reflector antennas for space applications.

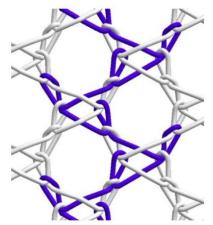
Antenna Application Area	
Earth Observation Missions	
Telecommunication Missions	
Science Missions	



5 m large deployable reflector surface with HPtex-USM-mesh under RF testing at Airbus Germany

Key Characteristics	
Applicable Frequencies	up to C-band
Needle Fineness	E16 (needles per inch)
Mass	< 22 g/m²
RF Performance / Reflection Loss	< 0.2 dB C-BAND
Material	Gold Coated Molybdenum (other materials available on request)
Knitting Patterns	ATLAS-ATLAS
Temperature Range	-250 °C up to +300 °C
Mesh Width	Single line: up to 4.5 m (width will be adjusted to request) Multi-line: up to 9.9 m (3 lines of 3.3 m sewed together) Ultra-width: on request.
Mesh Length	max. 15 m recommended (length will be produced as requested)
Cleanliness Class	ISO 8 (as baseline, higher classes on request)

Optional Services	
Mechanical tests on samples of the produced lot	
RF Tests on samples of the produced lot	
Automated sewing of mesh-stripes for large widths (e.g. 10 m)	
Delivery of cost effective training mesh out of steel	



ATLAS-ATLAS Pattern



