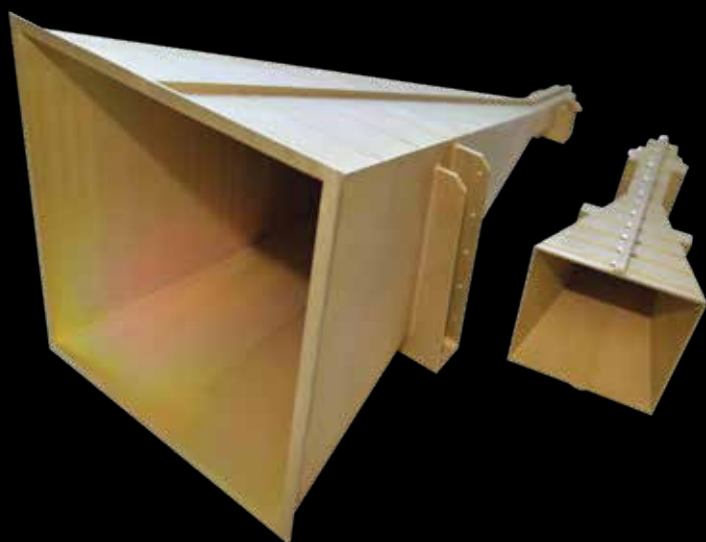
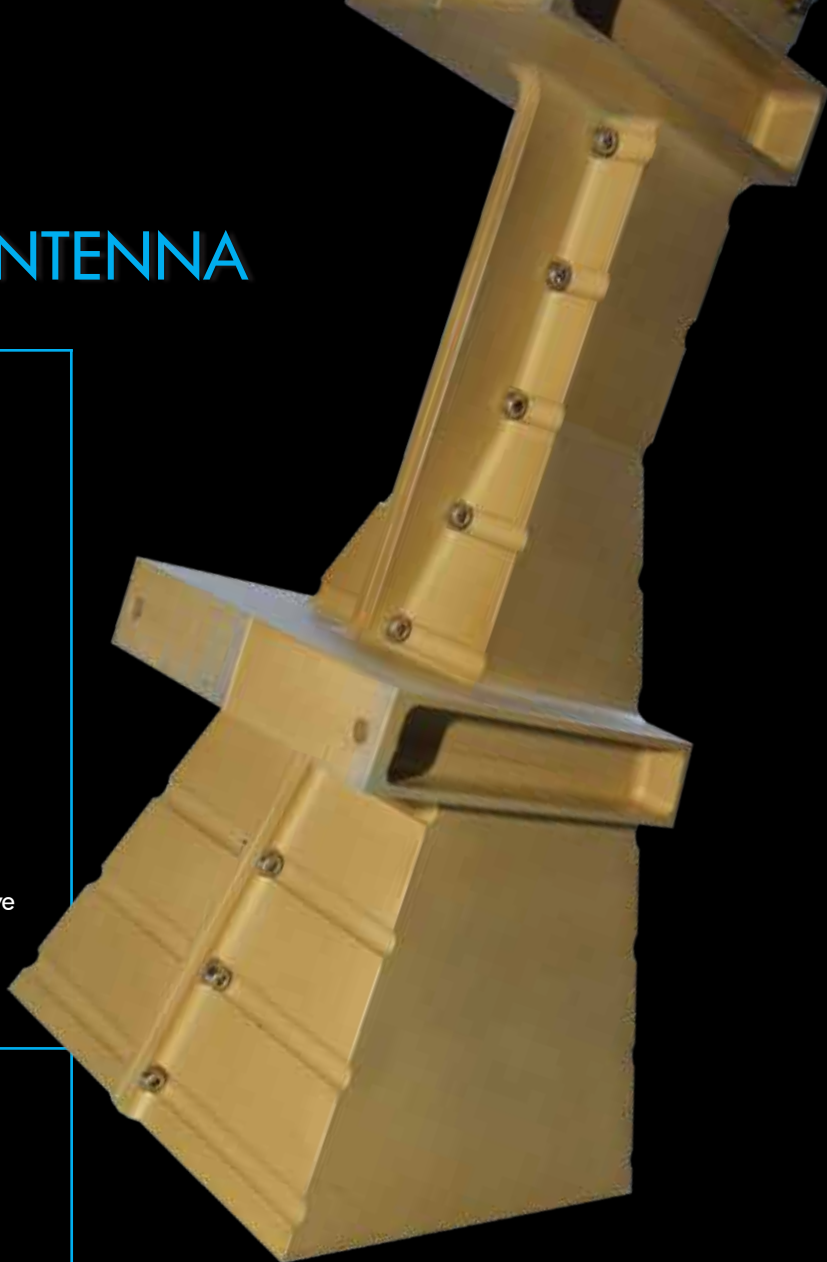


X BAND TRANSMIT ANTENNA

X HORN-18/23

The **XHorn family** is a dual circularly polarised high gain rigid horn antenna. Its two feed ports are well isolated to allow for simultaneous orthogonal microwave link operation. The simple design, precision milled aluminium construction and very low parts count ensures ruggedness and high reliability.



Benefits

- Low cost, high performance
- Simple, proven design
- Improved and scaled design of heritage flight antennas
- Allows lower transmitter power (lower DC power, lower heat loads, cheaper and simpler transmitter)
- Allows smaller ground station antenna to be used (simpler hardware and lower cost)

Features

- EO X-band window
- High gain, Narrow beam
- Dual circular polarised
- Good port isolation
- Low Axial Ratio



SPECIFICATIONS

	XHorn-18	XHorn-23
Performance		
Peak Isotropic Gain (RHCP & LHCP)	18 dBic	23 dBic
Cross Polar Isolation (port to port)	> 20 dB	> 25 dB
Bandwidth (S11,22 < -15 dB/ -18dB)	8000 - 8500 MHz	8000 - 8500 MHz
Axial Ratio at Boresight	< 1.5 dB	< 1.5 dB
Design Life	7 years	7 years
Mechanical		
Dimensions	252x 113.4 x 103.4 mm	547x 216.3 x 214 mm
Weight	< 450g	< 1.73 kg
Interface	4 off M4	4 off M6
Environmental		
Operating Temperature	-20°C to +60°C	-20°C to +60°C
Random Vibration (Qualification)	14g RMS	14g RMS
Radiation (component level)	> 15 kRad	> 15 kRad