

'MANTIS' 1.2m Ku-Band Single Box Flyaway

- The MANTIS 120KA 1.2m Flyaway antenna is manufactured using the latest carbon fibre materials to provide a light weight rugged system accommodated in only one flight cases. Mantis 120 systems are available in Ku, DBS, Ka, and X bands. Electronics are available in single thread, power combined or 1:1 redundant configurations.
- Single flight cases.
- New light-weight design.
- Easily deployed by a single user.
- IATA checked baggage compliant.
- Constructed from latest carbon fibre composite materials for minimum weight.
- Multiple band operation available



Specification

RF	Cross polar isolation > -35 dB relative to co-polar gain within 1 dB contour	Pol. adjustment +/- 95 °(linear polarisation only)
Diameter 1.2 m	VSWR	Dimensions
Configuration Offset fed	Tx 1.2 : 1	Single Case 495mm * 1050mm * 650mm
Frequency	Rx 1.3 : 1	Weight
Tx 12.75 to 14.5 GHz	Port to port isolation:	Single Case < 35kg
Rx 10.95 to 12.75 GHz	Tx / Rx 40 dB (110dB incl Filter)	Temperature
Gain	Rx / Tx 30 dB	Operational -20 to +50°C
Tx 43.3 dBi (min. 14.0 GHz) (43.7 typ.)	Mechanical	Transport -40 to +70°
Rx 41.2 dBi (min. 10.95 GHz) (41.7 typ.)	Mount: Elevation over Azimuth	Windspeed 20 m/s operational 30 m/s survival
Waveguide loss	Operation Manual Motorised Azimuth/Elevation (optional)	Pointing Stability < +/- 0.2 °
Tx 0.5 dB (Feedarm / OMT)	Interface	Humidity 0 to 100% RH
Rx 0.3 dB (OMT/Filter)	Tx WR75 Quick Release	Options H/V polarisation switch X-axis waveguide kit Transmit reject filter 3 port feed 4 port feed
Off-axis gain	Rx WR75 Quick Release (N-Type with LNB fitted)	
Tx 23 - 25 log Ø dBi for 1° < Ø < 48° -10 dBi for 48° < Ø < 180°	Movement	
Rx 26 - 25 log Ø dBi for 1° < Ø < 48° -10 dBi for 48° < Ø < 180°	Azimuth adjustment +/- 180° coarse adjust, +/- 2.5° fine adjust	
Polarisation Linear orthogonal	Elevation adjustment 0 ° to 90 ° (with additional Mount elevation)	
Feed 1 Tx port 1 Rx port		