

Starwin 3.7m Ka Band Antenna Datasheet



General Description of 3.7m Ka band antenna

Starwin 3.7 m Ka band ring focus antenna is designed for Ka band transmit and receive operation.

- The precision aluminum reflector is constructed with stretch formed double coated 12 panels, strong back structures and hub, free of field alignment.
- The standard designed azimuth over elevation king post pedestal provides a cost-effective solution for ground or roof installation with high stiffness and stability, wide Az&El moving range and fine drive performance, ensure the pointing and tracking accuracy.
- Also supplied with limit switches, foundation hardware kit and required packing.

Key Features

- * Meets or exceeds CCIR 580 and INTELSAT Requirements
- * Motorized and tracking available
- * Precision compression molded ring focus reflector
- * CP/LP switchable feed
- * Hot dip zinc steel pedestal, hub & back struts
- * Galvanized stainless steel fasteners
- * Strong structure and high wind resistance

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Options

- * Motorization kits
- * Controller and tracking receiver
- * 2 ports/ 4 ports linear/ circular polarized feeds
- * Feed blower or deicing with automatic controls
- * Lightning Rod Kits
- * Non-penetrating mount (NPM)
- * Integrated LNB or LNA systems
- * HPAs, converters and M&C systems
- * Turnkey installation & testing

Electrical Specification

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Туре	KA-370A	
	KA-Band	
Operating Frequency, GHz	Receive	Transmit
	17.7~21.2	27.1~31
Gain, Mid-band, dBi	54.9	57.8
Polarization	LHCP/RHCP	
XPD (on Axis), dB	35	35
XPD across 1dB Beam Width, dB	30	30
VSWR	1.25:1	1.25:1
Antenna Noise Temperature 2-port feed		
10° Elevation	125K	
30° Elevation	85K	
50° Elevation	50K	
-3 dB Beam Width, Mid-band	0.27°	0.17°
Typical G/T	≥32dB/K at 20°elevation	
Tx. Power Capability, KW		1
Feed Interface	WR-42	WR-34
Feed Insertion Loss, dB	≤0.4	≤0.3
Isolation, Tx to Rx, dB	85	
First Sidelobe	-14	
90% Peaks under Following Envelop	29-25lgθ (1°≤θ≤20°)	

Mechanical Specification

Antenna	Diameter	3.7m
Antenn	а Туре	Ring Focus
Antenna	Material	High Quality Aluminium
Surface Acc	uracy (RMS)	≤0.3 mm
Antenna Pointing	Azimuth	±85°
Range	Elevation	0° ~ 90° (Continuous)

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	Polarization	±90°(Continuous)
Drive	Mode	Manual or Motorized
Motor Drive System	Azimuth Travel Rate	0.11° /s (0.06° /s)
	Elevation Travel Rate	0.17° /s (0.08° /s°)

Environmental Specification

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Operational Wind	79km/h gusting to 97km/h	
Survival Wind	200km/h	
Temperature	- 20°C ~ + 48°C	
Relative Humidity	100 %	