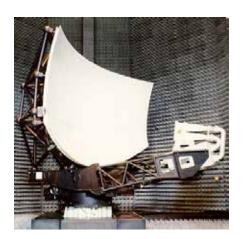


EA5325 Antenna

The EA5325 shaped reflector radar antenna is designed to provide local or terminal area coverage using a modified cosecant² elevation pattern operate in conjunction with a radar system giving constant returns from aircraft flying at constant altitude.

A dual beam receive capability is given to enhance high angle performance and minimise short-range ground returns. Polarisation switching between Linear and Circular is provided on both main and auxiliary beam and a cross polarised output is available on both beams that is used as a receive weather channel.



Key features include:-

- Low cost of ownership
- High angle of coverage up to 35°
- Excellent beam shaping and sidelobe control
- Polarisation switching on auxiliary & main beams
- Robust build for low life cycle costs
- No radome requirement
- Transportable versions available
- Accepts LVA's from a variety of Suppliers

General & Mechanical				
Туре	Shaped reflector			
Aperture Size		5.3 x 2.5 m		
Total weight (incl. turning gear		3.3 tonnes		
& motor, excluding LVA)				
Height incl. Pedestal & stand		3.8 m		
Max Swept radius		3.4 m		
Rotation rate (typical)		Up to 15		
		r.p.m		
Design Life		20 years		

Environmental				
Wind		140 km/hr with 10 mm ice		
Speed		240 km/hr with 40 mm ice		
		(non rotational)		
Temp.	30°C - + 70°C (incl 18° solar)			
		-50°C - + 70°C (optional)		
Humidity		5% to 100%		
Altitude	itude SL to 3500 m			
Protection		Suitable for Coastal		
		Environment.		
*		With 1.25 cm ice on PSR		

Electrical Specification			
Beam Characteristics	Auxiliary Beam	Main Beam	
Gain (incl. Microwave Loss)	32 dBi at rotary joint	34 dBi at rotary joint	
VSWR (average / peak)	1.40:1		
Frequency Range	'S' Band - 2.7 -3.2 GHz		
Circular Polarisation (both	20 dB min ICR measured in the principal azimuth and		
beams)	elevation planes		
Azimuth Beamwidth (-3dB)	1.5° ± 0.1°	1.5° ± 0.1°	
Azimuth Sidelobes (both	-26.0 dB Max (from 0° to ± 10°)		
beams)	-32.5 dB Max (from ±10° to ± 30°)		
	-35.0 dB Max (from ± 30° to ± 180°)		
Elevation Beamwidth (-3dB)	6.0° nominal	4.5° nominal	
Signal Outputs (both beams)	Target – Co-polar signal : Weather – Cross Polar signal		
Vertical Beam Separation	Between peaks of the Aux. and Main beam is 5.5° ± 1°		

Options

SSR/MSSR Co-mounting capability; dual redundant motors; choice of encoders or Inductosyn®; choice of Rotary Joint; obstruction lights.

Specifications are subject to change as part of Easat's ongoing improvement policy. Customers are advised to confirm specification prior to contract