

## Type Specification

The EA2526-XS shaped reflector antenna is purpose designed to meet the modern requirements of vessel traffic systems and coastal surveillance. It is particularly suited for coastal radar system operating in areas which experience heavy rainfall rates.

This design offers enhanced radio frequency performance compared with the earlier designs such as the Eaton-AIL 25 foot and the Racal-Decca HR25 25 foot reflector antennas. The EA2526-XS antenna has been specifically designed as an upgrade for these older structures as well as new installations.

Available in several variants, the EA2526 series antennas utilize the same main reflector with different feed structures to satisfy various customer needs. Other variants include single S-band and single X-band frequency systems.



General & Mechanical		Environmental	
Type	Shaped Reflector	Operational Wind Speed	160 km/hr
Aperture Size	7.5 m x 1.0 m	Survival Wind Speed	240 km/hr
Total weight (incl. turning gear)	< 3.25 tonnes (Cast Iron) < 2.50 tonnes (Al. version)	Humidity	100%
Overall Height	2.35m (from mounting flange)	Operational temp.	-30°C to +60°C
Max Swept radius	4.1 m	Protection	Suitable for salt laden coastal environment.
Rotation rate	Up to 22 r.p.m (nominal)		
Design Life	20 years		

Electrical Specification		
Beam Characteristics	<i>X-band Pencil Beam</i>	<i>S-band Pencil Beam</i>
Operating Frequency	9.0 – 9.5 GHz	2.9 – 3.2 GHz
Gain	46 dBi at rotary joint	35 dBi at rotary joint
VSWR	≤ 1.3:1	≤ 1.3:1
Polarisation	Circular or Switchable	Fixed Circular
ICR	-17 dB in Az. and El. plane	
Boresight offset X/S	0.9°	
Azimuth 3dB Beamwidth	≤ 0.35°	≤ 1.1°
Azimuth Sidelobes	Within 10° ≤ -26dB Backlobes ≤ -38dB	Within 10° ≤ -25dB Backlobes ≤ -38dB
Elevation 3dB Beamwidth	1.8°	5.5°

Options at Extra Cost
Dual redundant motors; choice of encoders; choice of polarisations; 'S' & 'X' band only variants. Various rotation speeds, various environmental specifications.

*Specifications are subject to change as part of Easat's ongoing improvement policy.  
Customers are advised to confirm specifications prior to contract. Rev2 July 2008*