

## Type Specification

The EA2526-DF shaped reflector antenna is purpose designed to meet the modern requirements of vessel traffic systems and coastal surveillance.

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-DF 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 utilise the same main reflector with different feed structures to satisfy various customer needs. Other variants include single S band and X/S dual frequency systems.



General & Mechanical	
Type	Shaped Reflector
Aperture Size	7.5 m x 1.0 m
Total weight (incl. turning gear)	< 3.25 tonnes (Cast Iron) < 2.50 tonnes (Al. version)
Overall Height	2.35m (from mounting flange)
Max Swept radius	4.1 m
Rotation rate	Up to 22 r.p.m (nominal)
Design Life	20 years

Environmental	
Operational Wind Speed	160 km/hr
Survival Wind Speed	240 km/hr
Humidity	100%
Operational temp.	-30°C to +60°C
Protection	Suitable for salt laden coastal environment.

RF Specification		
Beam Characteristics	<i>Pencil Beam variant</i>	<i>Inverse Cosc<sup>2</sup> Dual Feed variant</i>
Operating Frequency	'X' Band - 9.0 - 9.5 GHz	'X' Band - 9.0 - 9.5 GHz
Gain	46 dBi at rotary joint	44.5 dBi at rotary joint
VSWR	≤ 1.3:1	≤ 1.3:1
Polarisation	Circular or Switchable	Circular or Switchable
ICR	≤ -17dB in Az. and El. plane	≤ -17dB in Az. and El. plane
Azimuth 3dB Beamwidth	≤ 0.35°	≤ 0.33°
Azimuth Sidelobes	Within 10° - ≤ -26 dB	Within 10° - ≤ -26 dB
	Backlobes - ≤ -38 dB	Backlobes - ≤ -40 dB
Elevation 3dB Beamwidth	1.8°	2.2°

### Options at Extra Cost

Dual redundant motors; choice of encoders; choice of polarisations; 'S' & Dual 'XS' band variants.  
Various rotation speeds.

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