The EA3462 X band shaped reflector radar antenna is designed for high performance sea surface surveillance. It provides the highest gain currently available from this size of antenna, whilst minimizing weight and wind loading.

The Inverse Cosec² elevation beam shape is ideal for the detection of small and large targets at both short and long range, including where the antenna is mounted on a high tower, building or hillside.

The antenna is supplied as standard with remotely controlled polarization switching. Variants can be supplied for C band, or dual band operation. Existing applications include critical Vessel Traffic Systems applications, law enforcement, port security, border protection and search and rescue.

**Key features include:**
- High gain & Low Sidelobes
- Inverse Cosec² elevation pattern
- Switchable polarisation as standard
- Ability to transmit very short pulses (<20ns pulse width) with minimal distortion.
- Useful short range detection capability to approx 22° below horizon.
- Suitable for frequency agile and frequency diverse operation

**General & Mechanical**
- **Type**: Shaped Reflector
- **Aperture Size**: 5.5 m x 0.7 m
- **Total weight (incl. turning gear)**: 1370kg
- **Overall Height**: 1.9m (from mounting flange)
- **Max Swept radius**: 3.1 m
- **Rotation rate**: Up to 22 r.p.m (nominal)
- **Design Life**: 20 years

**Environmental**
- **Operational Wind Speed**: 180 km/hr
- **Survival Wind Speed**: 240 km/hr
- **Humidity**: 100%
- **Operational temp.**: -30°C to +60°C
- **Protection**: Suitable for salt laden coastal environment.

**Electrical Specification**
- **Operating Frequency**: X-band, 9.0 – 9.5 GHz
- **Gain**: 40dBi
- **VSWR**: ≤ 1.3:1
- **Polarisation**: Circular or Switchable
- **ICR**: ≤ -17dB in Az. and El. plane
- **Azimuth 3dB Beamwidth**: ≤ 0.45°
- **Azimuth Sidelobes**: ≤ -28dB
- **Elevation 3dB Beamwidth**: 4.2°

**Options at Extra Cost**
- Dual encoders; choice of encoders. Fixed, dual or variable rotation rates. Reflector can be reversed for air surveillance.

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