

Ku-Band 360° Corner Reflector Array



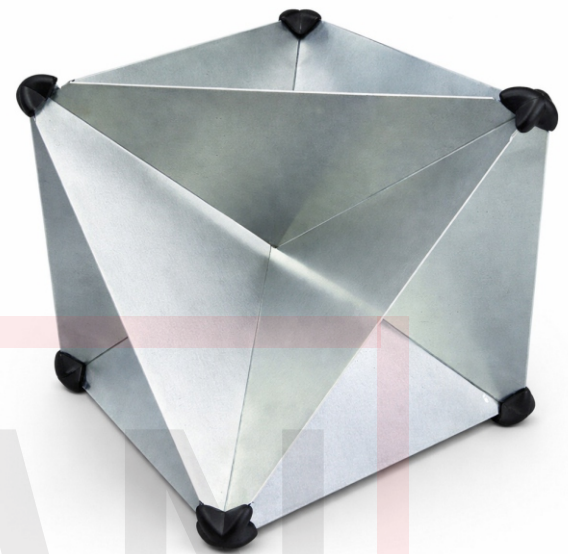
Stealth

MAAN
DEFENCE

Array ID.: ss001218

Reflectors are typically realized using multi-faceted corner reflectors, cylindrical arrangements, omnidirectional faceted panels, or arrayed trihedral/dihedral elements, ensuring that incident energy is reflected back toward the source or scattered in a controlled manner across all bearing angles.

In radar applications, a 360-degree passive reflector provides azimuth-independent Radar Cross Section (RCS) enhancement, making it suitable for calibration targets, decoys, navigation markers, and signature augmentation of low-RCS platforms. In optical or IR domains, reflective coatings and surface texturing are optimized to ensure angular uniformity in reflectance.



Features

- ▶ Ku-Band Trihedral Corner Reflector Array.
- ▶ Suitable for ground-based and Airborne Ku-band radar.
- ▶ Continuous 360° azimuth.
- ▶ Multi-element circular Configuration.
- ▶ Compatible with far-field RCS testing.
- ▶ Minimal maintenance and long operational life.
- ▶ High RCS single element.
- ▶ No power requirement and high reliability.

Applications

- ▶ Radar target simulator.
- ▶ Radar System calibration.
- ▶ Military Decoy.

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Electrical Performance/ Environmental Capability

- Simulated 360° Average RCS: 18–25 dBsm.
- Worst-case Azimuth RCS: ≥ 15 dBsm.
- Operating Temperature: -20°C to $+70^{\circ}\text{C}$.
- Environmental Suitability: All-weather.



Mech specs

Parameter	Requirement
Edge Length	859 mm [33.8"]
Geometry	Circular Array
Material	TCR Al (6mm)/Structure (MS)
Surface Finish	TCR (matte metallic)/Structure (Powder coating)
Weight	700kg

RCS Simulated results Coherent and Incoherent criteria

