

**PRODUCT
SPECIFICATIONS**

Detail Photos
(on right from top to bottom)
Pre-assembled Az/EI Mount
RF tested Ku-band feed
assembly



Type approved for use
on Intelsat and Eutelsat
satellite systems



1.2 m RxTx Class I Antenna System TYPE 123

The ASC Signal Type 123 1.2 m Class I Offset Antenna is a rugged commercial grade product suitable for the most demanding applications. The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which strengthens the antenna and helps to sustain the necessary parabolic shape. The reflector optics feature a long focal length for excellent cross-pol performance.

The Az/EI mount is constructed from heavy-gauge steel to provide a rigid support to the reflector. The Az/EI mount secures the antenna to any 73-76 mm (2.88"-3.00") mast and prevents slippage in high winds. A specially formulated powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision offset thermoset-molded reflector.
- Long focal length optics for low cross-pol performance.
- Available with Ku-band co-pol or cross-pol feeds.
- Galvanized 19 mm (.75 in) O.D. feed support legs for lightweight outdoor units (ODU's).
- Plated hardware for maximum corrosion resistance.
- Class I system designed for typical 1 W and 2 W Ku-band Block Up-Converters.*

* 2 kg or 4.5 lb max. weight for RF electronics (BUC and LNB)

SPECIFICATIONS

Type 123 1.2 m RxTx Class I Antenna System

Type Approval Information

Antenna Model	62 - 1235611
Intelsat Standard	Standard G (IESS 601)
Approval Code	IA077A00
Eutelsat Standard	VSAT
Approval Code	EA-V048

(See Our Website for a Complete List of Type Approvals)

RF Performance

Effective Aperture	1.2 m (48 in)
Operating Frequency	Tx 13.75 - 14.50 GHz Rx 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal
Gain (± 2 dBi)	Tx 43.3 dBi @ 14.3 GHz Rx 41.8 dBi @ 12.0 GHz
3 dB Beamwidth	Tx 1.2° @ 14.3 GHz Rx 1.5° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1.5° < Θ < 20° 29 - 25 Log Θ 20° < Θ < 26.3° -3.5 26.3° < Θ < 48° 32 - 25 Log Θ 48° < Θ < 180° -10
Antenna Cross-Polarization	30 dB in 1 dB Contour
Antenna Noise Temperature	10° El 45° K 20° El 31° K 30° El 24° K
VSWR	Tx 1.3:1 Rx 1.5:1
Isolation (Port to Port)	Tx 80 dB Rx 35 dB
Feed Interface	Tx WR75 Flat Flange Rx WR75 Flat Flange

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-Piece Offset Feed Prime Focus
Mount Type	Elevation over Azimuth
Elevation Adjustment Range	7° - 84° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous $\pm 20^\circ$ Fine Adjustment
Mast Pipe Interface	73 - 76 mm (2.88 in - 3.00 in) Diameter
Wind Loading	Operational 80 km/h (50 mph) Survival 200 km/h (125 mph)
Temperature	-50°C to 80°C
Humidity	0 to 100% (Condensing)
Atmosphere	Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117)
Solar Radiation	360 BTU/h/ft ²
Shock and Vibration	As Encountered During Shipping and Handling

(All specifications typical)



ASC Signal Corporation
1315 Industrial Park Drive
Smithfield, NC 27577
USA

Telephone: +1-919-934-9711

Internet: www.ascsignal.com

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ASC-VSAT29.1

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