

PRODUCT
SPECIFICATIONS

Detail Photos

(on right from top to bottom)

Pre-assembled Az/El/Skew
Mount with fine-elevation ad-
justment and stamped degree
scale

RxTx feed assembly



The reflector is thermoset-
molded for strength and
surface accuracy.



75 cm LFL RxTx Elliptical Antenna System

TYPE 756

The ASC Signal Type 756 75 cm LFL RxTx Elliptical 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 not only strengthens the antenna, but also helps to sustain the critical parabolic shape necessary for transmit performance.

The Az/El/Skew mount, constructed from heavy-gauge galvanized steel, provides a rigid support to the reflector. The mount secures the antenna to any 60 mm (2.38") O.D. mast and prevents slippage in high winds. In addition, the Az/El/Skew mount allows for precise alignment of the elliptical reflector to the geostationary arc, taking full advantage of the antenna's performance.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision elliptical offset thermoset-molded reflector.
- Long Focal Length optics for low cross-pol performance.
- Fine azimuth and elevation adjustment.
- Rigid steel feed support arm.
- Factory assembled Az/El/Skew mount for optimum alignment capability.
- Plated hardware for maximum corrosion resistance.
- Includes RxTx feed assembly.

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RF Performance

Effective Aperture	75 cm equivalent (30 in)
Operating Frequency	Tx 14.00 - 14.50 GHz Rx 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal
Gain (± 2 dBi)	Tx 39.1 dBi @ 14.3 GHz Rx 37.6 dBi @ 12.0 GHz
3 dB Beamwidth	Tx 1.4° @ 14.3 GHz Rx 1.7° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1.5° < Θ < 7° 29 - 25 Log Θ 7° < Θ < 9.2° +8 9.2° < Θ < 48° 32 - 25 Log Θ 48° < Θ < 180° -10 (Typical)
Antenna Cross-Polarization	32 dB on Axis
Antenna Noise Temperature	62° K ± 5 ° K
VSWR	Tx 1.3:1 Rx 1.4:1
Isolation (Port to Port)	Tx 30 dB 80 dB (with Optional TRF) Rx 30 dB
Feed Interface	Tx WR75 Rx WR75

(All specifications typical)

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-Piece Offset Feed Prime Focus
Mount Type	Three Axis, Skew, Elevation and Azimuth
Polarization (Skew) Adjustment Range	$\pm 90^\circ$ Continuous
Elevation Adjustment Range	2° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, $\pm 5^\circ$ Fine Adjustment
Mast Pipe Interface	60 mm (2.38 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



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ASC-VSAT40.1

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