



ATS- series antenna consists of 5.3/4.5/3.7 meters of dual reflectors or prime focus dish with X-Y pedestal configuration. The pedestal is mounted on a rigid base extension tube suitable for installation on ground, rooftop or on track with an optional NPM (None penetrating Mount). Thanks to dual shape optics for achieved the superior G/T performance and prime focus shape to be suitable for verity of application.

The full sky coverage without zenith keyhole makes these antennas suitable for LEO or MEO satellite tracking.

### ATS Antennas Includes:

- 5.3m, 4.5m or 3.7m dual-reflector or prime focus shape antenna
- Full sky coverage motorized mount with X-Y configuration without zenith keyhole
- high resolution (  $0.01^\circ$  ) absolute encoders
- Limit switches safety mechanism
- Rack mount Antenna Controller
- X-band horn with Simultaneous LHC and RHC Polarization ( other bands also available)
- 50 meter cables
- One year warranty and 10 years part supply

### OPTIONS:

- NPM ( None Penetrating Mount)
- Radome
- LNA
- Custom made feed
- Dual S/X band or single S, C, Ku, Ka band feed



## RF SPECIFICATIONS:

	<b>ATS-37 (3.7 meter)</b>	<b>ATS-45 (4.5 meter)</b>	<b>ATS-53 (5.3 meter)</b>
Frequency band	X-Band (8.0 to 8.5 GHz)-other bands also available		
Polarization	Simultaneous RHCP and LHCP		
G/T	28.52 dB/K @8.2GHz El=5°	30.23 dB/K @8.2GHz El=5°	32.02 dB/K @8.2GHz El=5°
Gain	47.44 dBi	49.14 dBi	50.57 dBi
VSWR	≤1.35:1	≤1.35:1	≤1.35:1
Beamwidth	0.69° @ 8.2GHz	0.57° @ 8.2GHz	0.48° @ 8.2GHz
First Sidelobe	< -14dB	< -14dB	< -16dB
Axial ratio	≤1dB	≤1dB	≤1dB
Isolation	≥40dB	≥40dB	≥40dB

## MECHANICAL/ENVIRONMENTAL SPECIFICATIONS:

Antenna Diameter	ATS53 (5.3m) ATS45 (4.5m) ATS37 (3.7m)
Reflector type	Dual reflector or prime focus
Mount type	X-Y type
Antenna travel range	X/Y ±90° without zenith keyhole
Acceleration (each axis)	0 to 5°/s <sup>2</sup>
Velocity (each axis)	0 to 5°/s
Tracking Accuracy	<0.05°
Pointing accuracy	0.07°
Surface Accuracy	0.5 mm
Outdoor Operating Temperature	-40° to +55° C
Indoor Operating Temperature	10° to 30° C
Outdoor Humidity	0%~100%
Indoor Humidity	<85% non-condensing
Operational Wind	75 km/h gusting to 85 km/h
Survival Wind	180 km/h (in park position at zenith) gusting to 210 km/h
Seismic	0.3 G horizontal, 0.15 G vertical
Ice Loading	13mm Operational; 25mm Survival
Adaptation	Salt, pollutant, radiation, rain