



ATS-5.3 consists of 16-panel 5.3 meter dual reflector with X-Y pedestal configuration. The pedestal is mounted on a rigid base extension tube suitable for installation on ground or rooftop with an optional NPM (None penetrating Mount). Thanks to dual shape optics for achieved the superior G/T performance.

The full sky coverage without zenith keyhole makes this antenna suitable for LEO satellite tracking.

ATS-53 INCLUDES:

- 5.3 meter dual-reflector shape antenna
- Full sky coverage motorized mount with X-Y configuration without zenith keyhole
- high resolution (0.01°) absolute encoders
- Limit switches safety mechanism
- Rack mount Antenna Controller
- X-band horn with Simultaneous LHC and RHC Polarization
- 50 meter cables
- One year warranty and 10 years part supply

OPTIONS:

- NPM (None Penetrating Mount)
- Radome
- LNA
- L, C, Ku, S and Ka bands feed
- Dual S/X band feed



5.3 Meter X-Band Antenna Tracking System

RF SPECIFICATIONS:

Operating frequency	8.0 to 8.5 GHz
Polarization	Simultaneous RHCP and LHCP
G/T	31.2 dB/K @8.2GHz El=5°
Gain	50.1 dBi
VSWR	≤1.35:1
Beamwidth	0.48° @ 8.2GHz
First Sidelobe	< -14dB
Axial ratio	≤1dB
Isolation	≥40dB

MECHANICAL/ENVIRONMENTAL SPECIFICATIONS:

Antenna Diameter	5.3m
Reflector type	Dual reflector shape
Mount type	X-Y type
Antenna travel range	X/Y ±90° without zenith keyhole
Acceleration (each axis)	0 to 5°/s ²
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