



Model GSA-39KaXY Ground SATCOM Satellite Dish

Features:

- Ka Band Frequency Coverage
- X-Y Pedestal
- 39 Inch Reflector (1 meter)

Applications:

- Suitable for Satellite Tracking (No Keyhole Issue)
- Designed to Work in Open Air (No Radome)
- PC-based Automated Computer Control with P700 ACU

Options:

- High Pointing Accuracy with Low Backlash
- RF Electronics Packages Available



Designed to support solid reflectors in the range of .90 to 1.5-meters in winds of 60 MPH. High output torque with ultra-low backlash is accomplished with the use of two stage reduction gearboxes and brushless DC motors. The gearboxes use built-in angular ball bearing construction, which improves the ability to support external loads, increases moment rigidity and maximum allowable moment. The result is increased reliability and a reduction in maintenance. The use of cross-roller bearings throughout the gearbox yields low backlash (less than 1 arc min.).

For added reliability, the pedestal is designed with servo amplifiers that have protection for over-current, voltage, and temperature. O-ring seals on all panels allow for positive air pressurization of the pedestal.

The GSA-39KaXY Ground SATCOM Antenna provides both electronic and mechanical stops and all components are modular, with connectorized sub-assemblies for ease of maintenance. Strategically placed and sized access hatches ensure that all pedestal components are easily accessible. Safety switches are implemented to protect the operator. Various mounting options are available for integration of customer provided RFE on the pedestal to allow for turnkey installation applications.

Model **GSA-39KaXY** - Ground SATCOM Antenna

Specifications*

KEY PERFORMANCE VALUES WITH STANDARD HARDWARE COMPLEMENT

RF/Electrical Parameters		Transmit	Receive
Frequency Range (GHz)		31.0 – 31.3	27.9 – 28.2
Antenna Aperture Size		1 meter	1 meter
Antenna Gain (Mid Band at OMT ports)		48.4 dB	47.5 dB
Axial Ratio		<1.0 dB	<1.5 dB
Antenna VSWR		<1.5:1	<1.5:1
Polarization		RHCP & LHCP	
Primary Power	Continuous	+48 VDC 3 Amps	
	Peak	+48 VDC 6 Amps	
Mechanical Parameters			
Environmental Qualification		IP65	
Velocity		≥10°/second	
Acceleration		≥10°/second ²	
Travel	Elevation	10° - 90°	
	Azimuth	360° continuous	
Pointing Accuracy	45 mph Wind	0.05°	
	60 mph Wind	0.10°	
Operational Wind Speed		≤60 mph	
GPS		Optional	
IMU/AHRS		Optional	
Environmental Parameters			
Temperature	Operating	-20°C to 55°C +1120 w/m ² solar	
	Storage/Transit	-40°C to 85°C +1120 w/m ² solar	
Wind Loading		Operational to 60 mph	
Humidity		100% RH	
Altitude	Operating	Sea Level to 10,500 ft. MSL	
	Non-Operating	≤ 40,000 ft. MSL	
Rain	Operating	Up to 2" / Hour	
	Non-Operating	Up to 4" / Hour	
Snow Load		10 lb./ft. ² returnable to operation in 15 min.	

NOTES

1. Other frequency bands available upon request.
2. Simultaneous orthogonal linear polarizations available.
3. 28 VDC Optional

* Specifications are subject to change without notice.



Communications & Power Industries

24/9 Powells Road, Brookvale, New South Wales 2100, Australia
+61 (02) 9939 4377 ■ info@avcomm.com.au