2.4M fixed remote sensing satellite receiving antenna

2.4M fixed remote sensing satellite receiving antenna is one of remote sensing receiving antenna series developed by our company, which is applied for remote sensing satellite receiving on sea and meteorology. This type of antenna adopts feed forward parabolic antenna, X-Y antenna pedestal. There are different types of antenna reflectors like mesh, aluminum or aluminum with hole. The overall antenna system structure is divided into four parts which are antenna reflector, X axis, Y axis and base. The antenna can operate at L, S or X-band, and can also operate at dual-band of L/S, L/X or S/X. Its tracking mode has two categories which are manual tracking and program tracking.

Main Performance Specification

Item	Electrical Specification	Parameter
1	Antenna type	Feed forward parabolic antenna
2	Antenna pedestal type	X-Y axis
3	Operational band	L, S, X-band or L/S, L/X, S/X dual-band
4	Antenna efficiency	50%~55%
5	Polarization	Circular
6	Sidelobe	First sidelobe ≤-14dB
7	VSWR	≤1.3:1
8	Circular polarization axial ratio	1.22:1(single band) or 1.41:1(dual-band)
9	Antenna travel range	X axis:±90°Y axis: ±90°
10	Travel speed	X axis:0.01°/S～5°/S, Y axis:0.01°/S～5°/S
11	Travel acceleration	X axis:0.001°/S^2～5°/S^2， Y aixs:0.001°/S^2～5°/S^2

12	Operational mode	Manual control, assigned position (digital guiding), program tracking, self-checking
13	Tracking mode	Manual tracking and program tracking
14	Pointing accuracy	1/8 half power beam width (X-band)
15	Monitor and interface requirement	It can communicate with monitoring computer. The interface is RS232/422/RS485 or network interface
16	Power supply	220V AC±10％, 380V AV±10％, 50Hz±5％