4.2M S/X-band Full Motion Antenna Specification

ELECTRICAL SPECIFICATION			
Diameter	4.2M		
Operating Frequency, GHz	S-Band		X-Band
	Receive	Transmit	Receive
	2.20～2.30	2.025～2.120	8.0～8.5
Gain, Mid-band, dBi	36.5+20log(f/2.2)	35.8+20log(f/2.025)	48.0+20log(f/8.0)
Polarization	Circular		Circular
VSWR	≤1.3:1		≤1.35:1
AR of CP	<1.5dB on axis		<1.0dB on axis
Typical G/T at 5 deg Elevation,	≥13.5 dB/°K		≥25.6 dB/° K
Feed Interface	N-50K		BJ-84
Radiation Pattern:First Sidelobe	Compliant with ITU-R S.580-6		
MECHANICAL SPECIFICATION			
Antenna Type	X-Y pedestal for LEO		
Antenna Pedestal Type	Full Motion Antenna		
Travel range	X/Y: ±90°		
Tracking	Program tracking, auto tracking		
Driving Chain	X:ACmotor Y:ACmotor		
Antenna velocity	up to 5°/s		
Drive Acceleration	up to 5°/s2		
Antenna Accessorial Parts and Interface	Hot Dip Galvanise,No painting,Foundation Hardware		
Antenna Drive	Motorized		
ENVIRONMENTAL SPECIFICATION			
Wind performance	67m/s mounted (in radome)		
Temperature	-40℃～+55℃		
Relative Humidity	0%～100%		
Rain	300mm/h		
Seismic (Survival)	0.3g (H), 0.15g (V)		