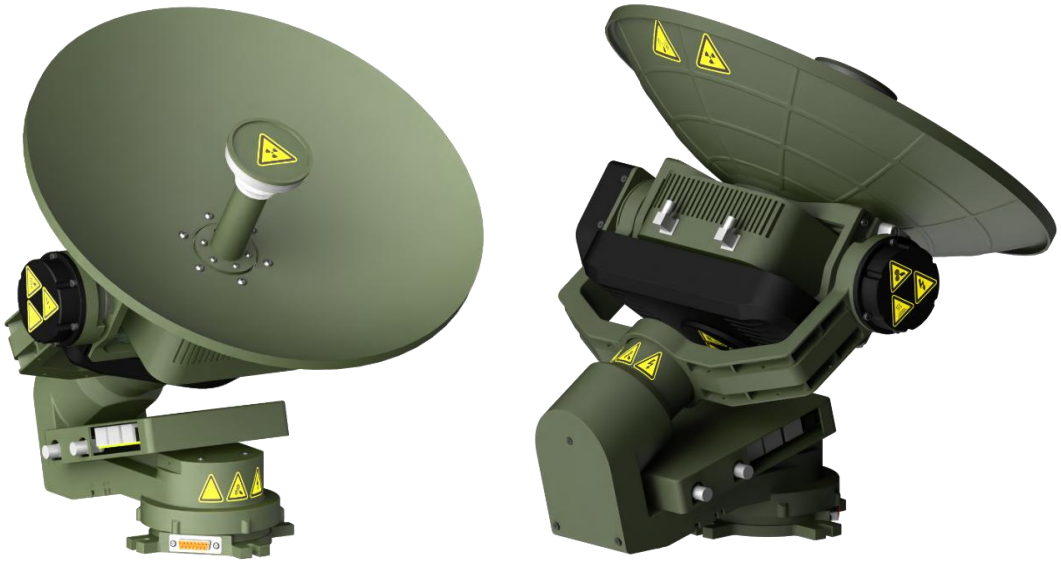
ALPHA SATCOM

Satellite Communication on the Move 0.3meter Antenna System

ASCOTM-03



Highlight

- Support Ku and Ka band
- Hat feed design with high efficiency and low sidelobe.
- IMU for keep tracking on the move, available working when GPS failed input position manually
- Quick lock satellite signal, 80s: cool started, 60s: hot start
- High tracking accuracy,< 0.5dB RMS
- Good tracking stability: A closed-loop stabilization algorithm was used for the azimuth.
- Fast block recovery time， 3s after 5 minutes blocking， 5s after 20minutes
- Fast switch satellite between different satellite: 8s
- User friendly, Easy maintenance, Modular design, simple interface, easy trouble shooting and maintenance.
- 3 axis stabilize, 4 axis tracking control

ALPHA SATCOM Inc.
The Oldest New Antenna Company On The Planet
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Earth Station Antenna

THA 7.3 LMC & LMKu & LMKa

Specification

Electrical Specification				
Diameter	0.35m			
Reflector	Carbon Fiber			
Type of Antenna	Hat feed parabolic Antenna			
Frequency(GHz)	Ku-Band		Ka-band	
	RX	TX	RX	TX
	10.70	13.75	17.7	27.4
	12.75	14.50	21.2	31.0
Polarization Type	H/V Linear		LHCP/RHCP	
Gain (dBi) (mid band)	31.1+20lg(f/12.25)	32.3+20lg(f/14.0)	35.2+20lg(f/19.6)	38.7+20lg(f/29.4)
First sidelobe (dB)	≤-14		≤-14	
G/T(dB/k)	9.3		11.37	
C-pol isolation (dB)	35 (on axis)		-	
Axis Ratio(dB)	-		1.5	
dB)	85	-	85	-
RX-TX isolation (dB)	-	30	-	30
VSWR	1.50:1	1.40:1	1.50:1	1.40:1

Mechanical Specification	
Azimuth Range	360°
Elevation Range	-8° - 100°
Polarization Range	±110°
Roll	±20°
Azimuth Velocity	100°/s
Elevation Velocity	100°/s
Azimuth Acceleration	200°/s²
Elevation Acceleration	200°/s²
Positioning system	GPS+BD
Stabilization	3 axis stabilize, 4 axis tracking
Tracking Accuracy	≤0.2° (R.M.S)
Initial Satellite Capture time	≤ 2min
Black Recover time	≤5s (Block 20min)
Weight	≤6.5Kg (include antenna, 16W KUTransceiver and IQ200/503
Size	≤
Power Supply	
Power supply	DC18-60V
Power consumption	80W

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