



## Datasheet for the 13m Ka-band THA with Monopulse

### Tracking

#### 1 Antenna Electrical Characteristics

Item	Description	
Type	1300THA-KA	
Frequency(GHz)	Tx:27.0-31.0	Rx:17.7-21.2
Gain (Mid-band, dBi)	≥69.1	≥65.7
Side Lobes	1 <sup>st</sup> sidelobe not higher than -14dB Other sidelobes compliant with ITU-R S.580-6.	
Antenna Noise Temperature (Diplexer Insertion loss less than 0.5dB )	150K (at 10° EL angel)	
Feed Type	Corrugated horn and TE <sub>21</sub> mode coupler	
VSWR for Corrugated Horn	≤1.15	≤1.15
Power Capability	1kW	/

#### 2 Antenna Mechanical Characteristics

Item	Description
Antenna Type	Modified Cassegrain Antenna, El over Az geometry
Antenna Diameter (m)	13.0
Main Reflector Accuracy (mm)	≤0.35rms
Subreflector Accuracy (mm)	≤0.15 rms
Mount Type	Az for Full-motion, EL for Limited-Motion (THA)
Driving Chain Mode	Dual-motor for azimuth axis Single motor for elevation axis
Drive range	Azimuth drive: ±170° continuous, gear and pinion Elevation drive: 0° - 90° continuous, ball screw jack drive.
Antenna Accessorial Parts and Interface	Enclosure with roller door Hot Dipped zinc



Item	Description
	Access ladder & platform, Hot Dipped zinc
	Lightning Arresting Rods
	Lightning Arrestor down-conductors
	Foundation HW

### 3 Antenna Servo Control and Tracking Characteristics

Item	Description
Travel maximum velocity	AZ Axis Drive Rates up to 0.5°/s; EL Axis Drive Rates up to 0.1°/s.
Autotrack method	Monopulse Tracking
Antenna Operation Mode	Monopulse tracking, Step tracking, Programmed Tracking; Stand-by, Manual Driving; Position Preset

### 4 Antenna Environmental Conditions and Other Features

Item	Description	Remark
Ambient Temperature	-40°C~+55°C (Outdoor) 0°C~+30°C (indoor)	
Relative Humidity	0%~100%	
Rain	Rate up to 50mm/h	
Anti-wind Capability	Steady wind: 45km/h, gust:72km/h	Normal Operation
	Steady wind: 72km/h, gust: 97km/h	Degraded Operation
	gust wind:180km/h	Survival in any position
	gust wind:200km/h	Survival in stow at peak
Others	Packing (sea freight)	
	Feed Rain Blower	
	Dehydrator	
	24 months warranty	



## 5 Antenna Photo



**Fig.1 Photo of 13m THA**

**For any specialized request please contact Suncom sales office**

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