

## SA-5.0T-C/Ku



### 1. Summary

The satellite communication antenna SA-5.0T C/Ku is ring focus designed. The antenna diameter is 5.0 meter, and the antenna mount is the type of A-E joist style. This antenna selects front-side shaped designing, with efficient feed, good radiation performance. The reflector and the antenna mount and the driving structure all have the features of high precision and robustness.

### 2. Main Technical Parameters

#### 2.1 Electrical Specifications

Electrical Specification	C-Receive	C-Transmit	Ku-Receive	Ku-Transmit
Frequency (GHz)	3.625~4.200	5.85~6.425	10.95~12.75	14.00~14.50
Gain(dBi)	44.9	48.0	53.9	55.4

Voltage Standing Wave Ratio	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beamwidth-3dB	1.03°	0.71°	0.36°	0.30°
-15dB	2.15°	1.43°	0.73°	0.61°
Noise Temperature	2/4 Port Feed		2/4 Port Feed	
10° E1	30/37K		60/65K	
20° E1	24/29K		50/54K	
40° E1	20/27K		44/52K	
Power Capacity		5000W		1000W
Interface	CPR-229G	CPR-159G/137G	WR-75	WR-75
Insertion Loss of Feed	0.15dB	0.18dB	0.4/0.45dB	0.4dB
Isolation				
Tx-Rx	85dB		85dB	
Linear pol.	30dB	30dB	30dB	30dB
Circular pol. Isolation	21dB	21dB		
Cross pol.	35dB(on axis)	35dB(on axis)	35dB(on axis)	35dB(on axis)
Axial Ratio	0.9/0.5dB	0.9/0.5Db		
Sidelobe Envelope	CCIR.580-2	CCIR.580-2		

## 2.2 Mechanical Specifications

Mechanical Specification	Parameter	Remark
Travel of Azimuth	±90°	Continuously
Travel of Elevation	5° ~90°	Continuously
Tracking Mode	Automatic&manual	
Surface Accuracy	<0.5mm (RMS)	
Weight	1200kg	
Painting	White	

## 2.3 Environmental Specifications

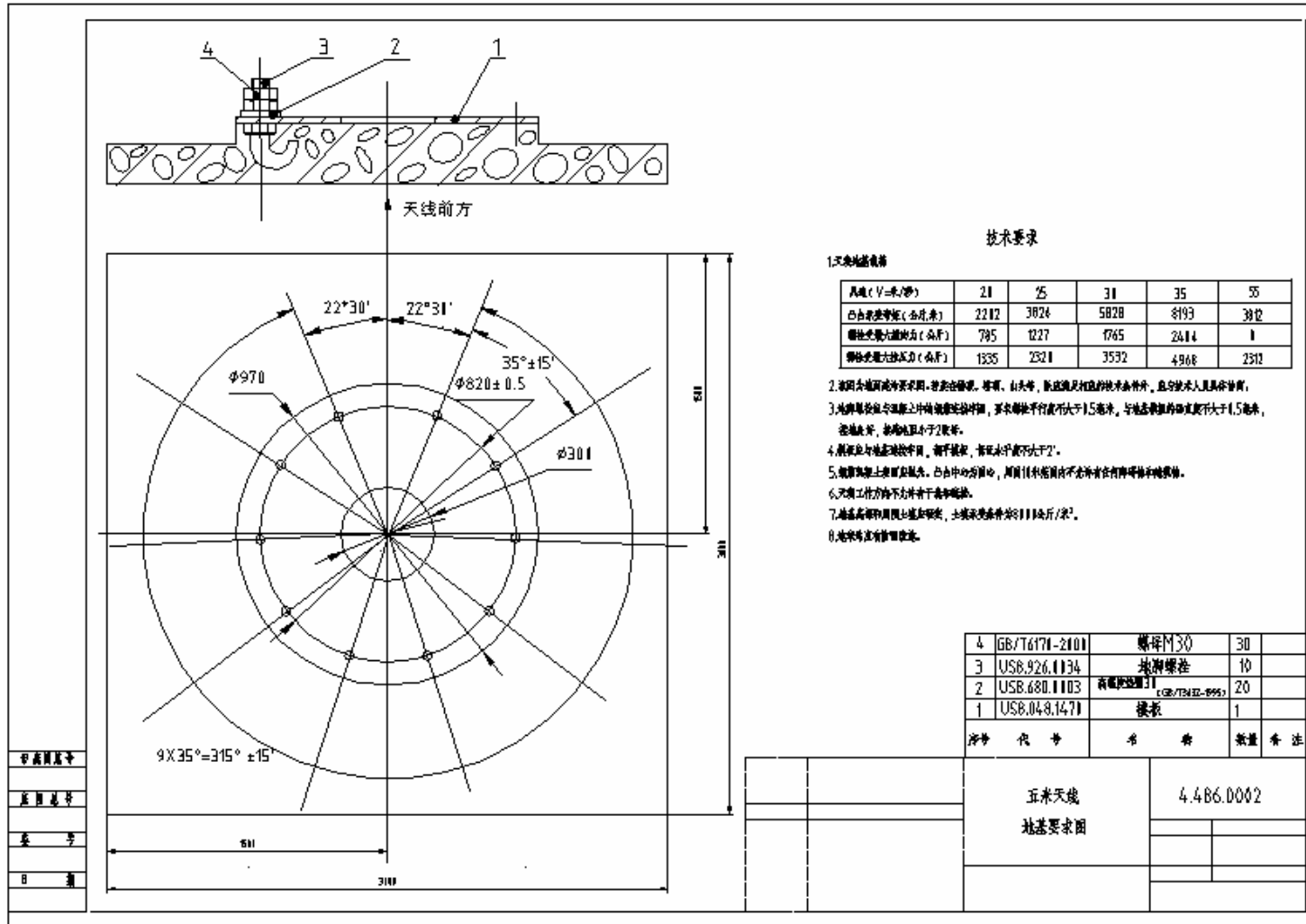
Environmental Specification	Parameter
Operational Wind Speed	72Km/h~97Km/h
Survival Wind Speed	200K/h
Humidity	0%~100%
Temperature	-30℃~+60℃
Anti-Seismic Capacity	Horizontal: 0.3G's Vertical: 0.15G's
Ice thick	13cm

## 3. Detail equipment list

NO.	Component name	Description	Qty.
1	Antenna Head	Mainreflector、radiate grider、drawing pole	16
		Hub	1
		Subreflector	1

2	Feed System	Feed horn&sleeve		1
		575Mhz Network		1
3	Pedestal	Seat	branch pole	Each of 2
			Mast	1
		Beam		1
		Azimuth&elevation drive system	Electrical machinery、 retarder	Each of 1
			Leading screw support、 sheath	Each of 1
4	Foundation parts	Template、 anchor blots		1
5	Spare parts			1
6	Install tool			1
7	User Manual			1

## 4. Foundation Technical Requirements



## 5. Packing List

S/n	Components name	Size	Qty.	Weight
1	Reflector& branch pole	2700×800×1600	2	250Kg
2	Sub-reflector	1200×1200×500	1	50Kg
3	Radiation beam	2000×900×700	2	260Kg
4	Hub	1700×1700×700	1	350Kg
5	Fastener	500×500×500	1	20Kg
6	Feed	1000×500×500	1	60Kg
7	Network	800×500×500	1	100Kg
8	Polarized adjustable device	700×700×900	1	60Kg
9	Feed sleeve	600×600×800	1	70Kg
10	Mast	3200×1500×300	1	500Kg
11	Branch pole	3200×1000×700	1	330Kg
12	Gear-box	2500×1000×500	1	250Kg