

## SA-1.2TC/Ku Communication Antenna

### Description

SA-T1.20C/Ku antenna with aperture of 1.2M, is of the type of single off-set feed design. Main reflector is made of alloy high grade aluminum. It possesses the characteristics of robustness, strong wind resistance and easy installation.

### Technical Specifications

Electrical	Rx-C	Tx-C	Rx-Ku	Tx- Ku
Frequency(GHz)	3.625~4.200	5.850~6.425	10.95~12.75	14.00~14.50
Gain(dBi)	32.5	35.6	42.0	43.0
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beamwidth(-3 dB)	3.9°	2.0°	1.5°	1.2°
Noise Temperature	2 Port Feed		2 Port Feed	
10° Elevation	46K		47K	
20° Elevation	37K		38K	
30° Elevation	36K		36K	
Power handling capacity		5000W		1000W
Interface	CPR-229G	CPR-159G	WR-75	
Feed insertion loss	0.15dB	0.18dB	0.4dB	0.4dB
Port-Port isolation				
Rx—Tx	85dB		85dB	
Cross polarization properties	35dB(on axis)	35dB(on axis)	35dB(on axis)	35dB(on axis)
Axial Ratio (dB)	0.5	0.5	0.5	0.5

SideLobe	29-25LOG( $\theta$ ) dBi	$1^\circ \leq \theta \leq 20^\circ$	29-25LOG( $\theta$ ) dBi	$1^\circ \leq \theta \leq 20^\circ$
	32-25LOG( $\theta$ ) dBi	$20^\circ < \theta \leq 48^\circ$	32-25LOG( $\theta$ ) dBi	$20^\circ < \theta \leq 48^\circ$
	-10(Average) dBi	$\theta > 48^\circ$	-10(Average) dBi	$\theta > 48^\circ$

\* Rx Freq within 10.95~12.75GHz,user can chose any 500MHz.

#### Mechanical properties

Properties	Index
Azimuth	$0^\circ \sim 360^\circ$
Elevation	$5^\circ \sim 90^\circ$
Package size L×W×H	1200×1200×500
Shipping weight	50Kg
Surface accuracy	C-0.5mm Ku-0.5mm
Paint	White

#### Environmental properties

Properties	Index
Operation wind speed	45mi/h to 60mi/h
Survival wind speed (any angle)	125mi/h
Temperature	$-30^\circ\text{C} \sim 60^\circ\text{C}$
Humidity	$0\% \sim 100\%$
Seismic (Survival)	0.3 G's horizontal
	0.15 G's vertical
Radiation	360 BTU/h/ft <sup>2</sup>
Atmospheric condition tolerance	Salt, Pollutants, and contaminants as encountered in coastal, industrial areas

#### System components

1. Main reflector and support structure ..... 1set
2. Two port linear feed system..... 1set
3. Linear feed adjustment components ..... 1set
4. Transmit reject filter..... 1set
5. Waveguide and adapter..... 1set
6. AZ—EL axial type pedestal ..... 1set
7. Azimuth manual adjustment system..... 1set
8. Operation and maintenance manual..... 1set
9. Foundation kit and drawing ..... 1set

