

2.4- Meter Dual-Reflector C-, Extended C-, Ku-Band



▶ 2.4m back View



▶ Suman 2.4m antenna with non-penetrating mount

PERFORMANCE SPECIFICATIONS (APERTURE 2.4M)

★ R. F SPECIFICATIONS	C-Band		Ku-Band	
	RECEIVE	TRANSMIT	RECEIVE	TRANSMIT
1. Frequency	3.625-4.2GHz *3.4-4.2Ghz	5.850-6.425GHz 5.925-6.725GHz	12.25Ghz-12.75Ghz *10.95Ghz-12.75Ghz	14.0-14.5GHz
2. Gain at Midband	37.96dB	41.73dB	47.77dB	49.0dB
3. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
4. Beamwidth (-3dB)	2.1°	1.35°	0.68°	0.58°
5. Antenna Noise Temperature				
5° Elevation	42°K		66°K	
10° Elevation	30 °K		52 °K	
20° Elevation	28 °K		45 °K	
30° Elevation	25 °K		43 °K	
6. Typical G/T at 20° Elevation, Clear Horizon, 4GHz with 55°K LNA	18.9dB/°K		26.2 dB/°K	
7. Power Handling Capability		2kW		2kW
8. Feed Interface	CPR-229F	CPR-137G	WR 75F	WR 75G
9. Feed Insertion Loss	0.15dB	0.18dB	0.2dB	0.4dB
10. Cross Polarization Isolation				
On Axis	35dB	35dB	35dB	35dB
Within 1 dB Beamwidth	30dB	30dB	30dB	30dB
11. Port to Port Isolation (Tx-Rx with Filter)	≥85dB		≥85dB	
12. Axial Ratio (Circular Polarization) 2 Port Tx/Rx	1.3	1.3	1.3	1.3
13. Sidelobes				
1st sidelobe		-14dB		-14dB
100λ/D° ≤ θ ≤ 48°		29- 25Log θ dBi		29- 25Log θ dBi
* Provided according to User's requirement				

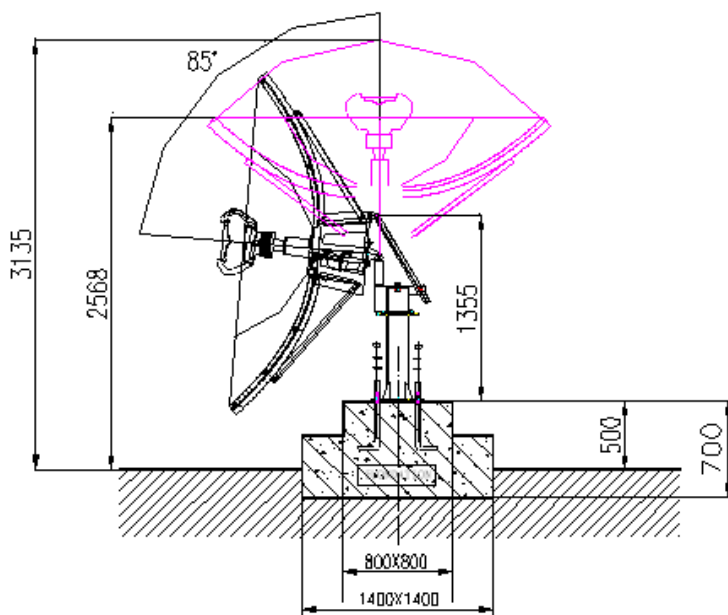
★ MECHANICAL SPECIFICATION		★ ENVIRONMENTAL SPECIFICATIONS	
1. Azimuth Travel	360°	1. Operational Wind Speed	35m/s
2. Azimuth Travel Rate	0.5 °/s	2. Survival Wind Speed	55m/s
3. Elevation Travel	5°-90° continuous	3. Ambient Temperature	-50°- 60°
4. Elevation Travel Rate	0.5 °/s	4. Rain (operational and survival)	10cm/h
5. Polarization Travel	±90 °	5. Solar Radiation	1000kcal/hm ²
6. Materials of Reflectors	aluminum	6. Relative Humidity	0%-100%
7. Finish of Reflectors	White paint	7. Radial Ice	2.5cm
8. Finish of Steel parts	Heating & soaking with zinc	8. Seismic(Survival)	0.3G's Horizontal 0.1G's Vertical
9. Weight (Gross / Net)	255kg/172kg		
10. Shipping Volume	1.15m ³		

APPROVALS

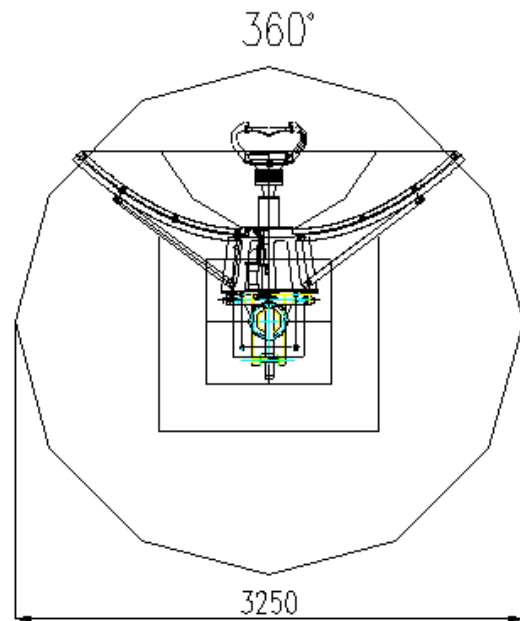
MODEL	DESCRIPTION	SATELLITE	APPROVAL ORGANIZATION	APPROVAL DATE
SM-T3.7R	3.7m C-Band	AsiaSat 1	Asia Sat.Telecomm. Co. Ltd.	13/07/1992
SM-T4.5R	4.5m C-Band	AsiaSat 1	Asia Sat.Telecomm. Co. Ltd.	13/07/1992
TP-T3.7R	3.7m C-Band	AsiaSat 2	Asia Sat.Telecomm. Co. Ltd.	10/04/1996
TP-T2.4R	2.4m C-Band	AsiaSat 1	Asia Sat.Telecomm. Co. Ltd.	15/04/1996
SM-T4.5R	4.5m C-Band	AsiaSat 2	Asia Sat.Telecomm. Co. Ltd.	20/09/1996
TP-T3.0R	3.0m Ku-Band	AsiaSat 2	Asia Sat.Telecomm. Co. Ltd.	05/12/1996
SM-T3.0R	3.0m C-Band	AsiaSats	Asia Sat.Telecomm. Co. Ltd.	18/09/1998
SM-T3.7RK	3.7m Ku-Band	AsiaSats	Asia Sat.Telecomm. Co. Ltd.	18/09/1998
SM-T2.4R	2.4m C-Band	AP Stars	APT Sat. Co., Ltd.	18/07/1995
SM-T3.7RC	3.7m C-Band	AP Stars	APT Sat. Co., Ltd.	25/07/1997
SM-T4.5RC	4.5m C-Band	AP Stars	APT Sat. Co., Ltd.	25/07/1997
SM-T3.0R	3.0m C-Band	AP Stars	APT Sat. Co., Ltd.	12/10/1998
TP-T3.0R	3.0m Ku-Band	AP Stars	APT Sat. Co., Ltd.	12/10/1998
SM-T3.7RK	3.7m Ku-Band	AP Stars	APT Sat. Co., Ltd.	12/10/1998
SM-T4.5R	4.5m C-Band	Military Sat.	General Staff of PLA	03/06/1993
TP-T3.0R	3.0m Ku-Band	China Stars	China Telecomm. Broadcast Sat. Co.	10/12/1998
SM-	3.0m C-Band	China Stars	China Telecomm. Broadcast	10/12/1998

T3.0R			Sat. Co.	
SM-T3.7RK	3.7m Ku-Band	China Stars	China Telecomm. Broadcast Sat. Co.	10/12/1998
SM-T3.0R	3.0m C-Band	ChinaSat 1	China Orient Telecomm Sat. Co.	02/12/1998
SM-T3.7R	3.7m Ku-Band	ChinaSat 1	China Orient Telecomm Sat. Co.	02/12/1998
SM-T3.0RC	3.0m C-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	04/1999
SM-T3.0RK	3.0m Ku-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	04/1999
SM-T3.7RC	3.7m C-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	04/1999
SM-T3.7RK	3.7m Ku-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	04/1999
SM-T1.8RK	1.8m Ku-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	08/1999
SM-T1.2RK	1.2m Ku-Band	SinoSat 1	SINO Satellite Communications Company Ltd.	11/2000
SM-T1.8RK	1.8m Ku-Band	AsiaSats	Asia Sat.Telecomm. Co. Ltd.	12/04/2000

GEOMETRY

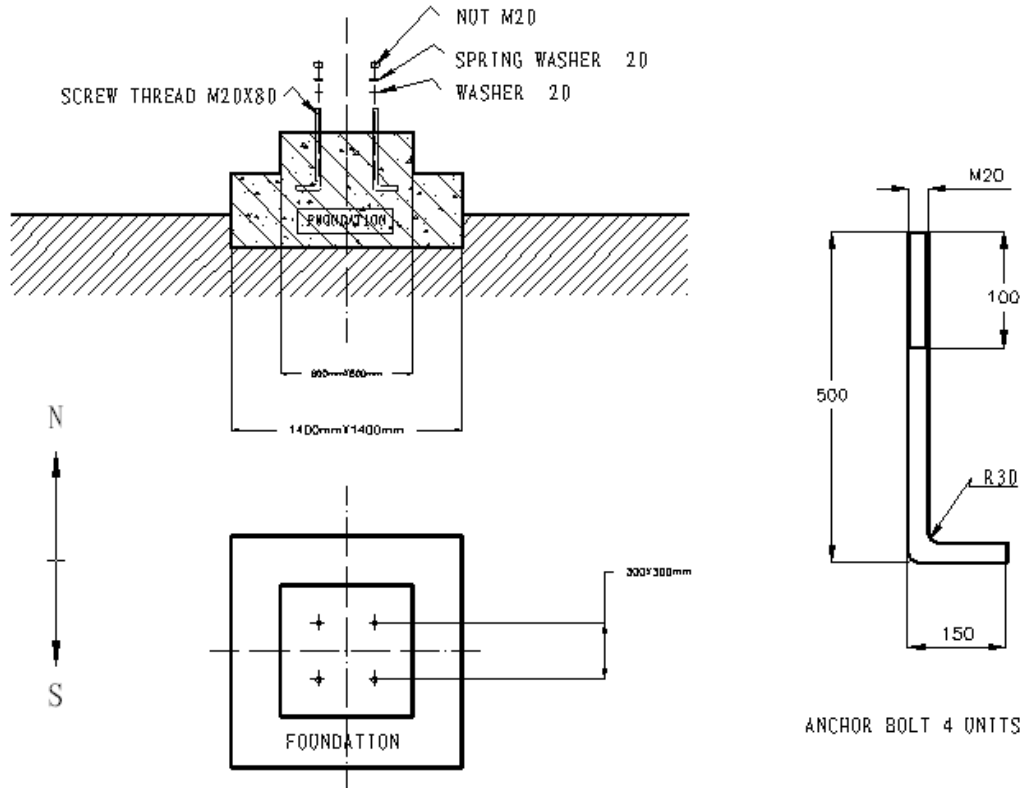


SIDE VIEW

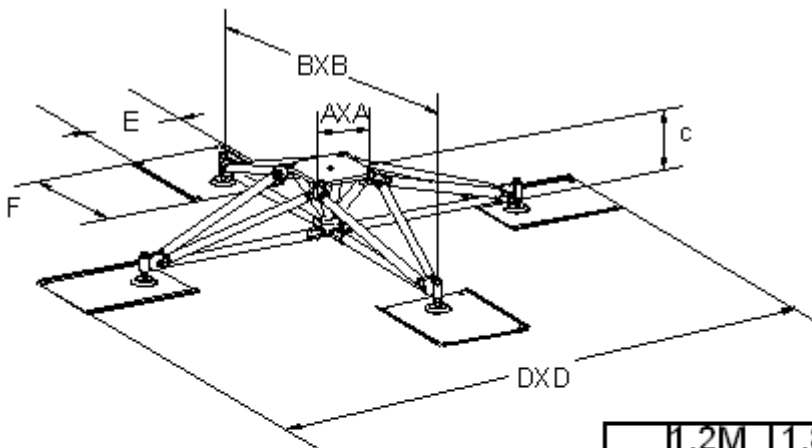


PLAN VIEW

2.4- Meter Dual-Reflector C-, Extended C-, Ku-Band (foundation drawings)

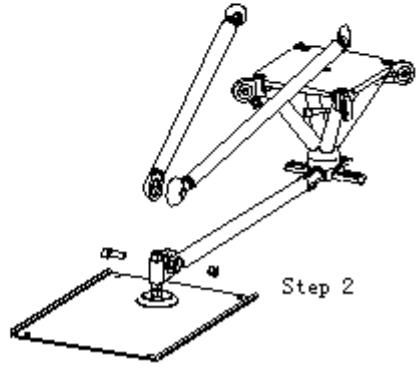
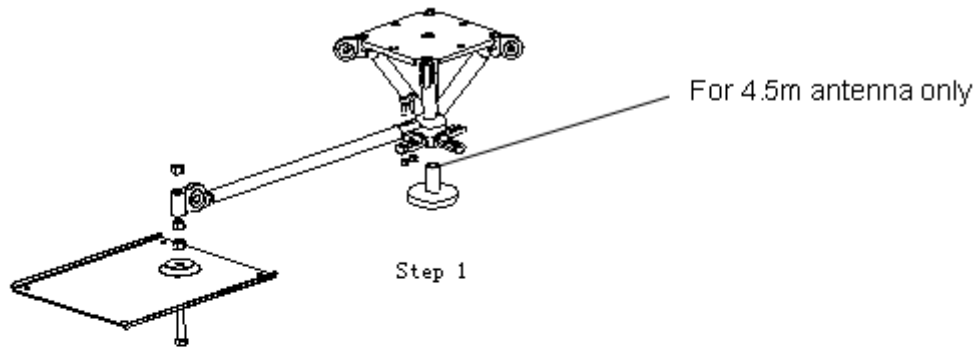


OPTIONS



	1.2M	1.8M	2.4M	3.0M	3.7M	4.5M
A	300	300	300	340	340	420
B	2245	2245	2245	2495	2495	4500
C	380	380	380	410	410	600
D	3258	3258	3258	3535	3535	5700
F×E	500*500	500*500	500*500	700*560	700*560	700*560
* Q	180	180	180	200	200	340
** Q	120	120	180	405	552	1023

- * N.W.: Net self-weight of Non-penetrating mount
- ** Q: Load weight for each bottom plate



SKETCH MAP
INSTALLATION OF
NON-PENETRATING

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