

COMSTAR® Antennas



Specification	ST-7	ST-10	ST-12	ST-14.5	PSF-16	PSF-20
Type	4 section	8 section	8 section	12 section	16 section	20 section
Operating Freq.	1 to 13 GHz	1 to 13 GHz	1 to 13 GHz	1 to 13 GHz	1 to 13 GHz	1 to 13 GHz
Diameter	2.3m (90")	3.0m (120")	3.69m (145")	4.5m (177")	4.9m (192")	6.1m (240")
Reflective Material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Mesh Thickness	C / Ku Mesh 0.7mm ±0.05mm	C / Ku Mesh 0.7mm ±0.05mm	C / Ku Mesh 0.7mm ±0.05mm	C / Ku Mesh 0.7mm ±0.05mm	C / Ku Mesh 0.7mm ±0.05mm	C / Ku Mesh 0.7mm ±0.05mm
Mounting	Polar Mount	Polar Mount	Polar Mount	Polar Mount	Fixed Mount	Fixed Mount
F/D Ratio	0.4	0.38	0.4	0.4	0.4	0.4
Feed	Prime focus Quad Feed Support	Prime focus Quad Feed Support	Prime focus Quad Feed Support	Prime focus Quad Feed Support	Prime focus Quad Feed Support	Prime focus Quad Feed Support
Pole Size (O.D)	89mm (3.5")	89mm (3.5")	89mm (3.5")	127 mm (5")	140mm (5.5")	140mm (5.5")
Focal Length	915mm (36")	1160mm (45 7/8")	1460mm (57 1/2")	1800mm (70 7/8")	1960mm (77")	2440mm (96")
Gain at 4.2 GHz	38.3 dBi	40.3 dBi	42.3 dBi	43.9 dBi	44.5 dBi	46.0 dBi
Gain at 12.2 GHz	46.5 dBi	47.8 dBi	49.8 dBi	50.8 dBi	52 dBi	53.1 dBi
First Side Lobe (dB)	≤-16	≤-18	≤-18	≤-16	≤-16	≤-16
EL Travel Range	0~90°	0~90°	0~90°	0~90°	0~90°	0~90°
AL Travel Range	0~360°	0~360°	0~360°	0~360°	0~360°	0~360°
Withstand Wind (Operational)	110km/h	110km/h	110km/h	110km/h	110km/h	110km/h
Weight						
Reflector - Net Weight	11.5kg	20.5kg	32kg	39kg	55 kg	110 kg
Reflector - Gross Weight	13.5kg	23.5kg	37kg	45kg	136 kg	206 kg
Mount - Net Weight	21kg	28.5kg	29kg	70kg	88 kg	115kg
Mount - Gross Weight	25kg	32kg	36kg	80kg	113kg	135kg
Feedsupport - Net Weight	1.8kg	2.5kg	3kg	21kg		
Feedsupport - Gross Weight	2kg	3kg	3.5kg	23kg		
Packing Size:						
Reflector	1.17 x 1.17 x 0.13	(1.26+0.065)2 x 1.53 x 0.25	(1.5+0.09)2 x 1.9 x 0.23	(1.2+0.07)2 x 2.53 x 0.5	2.75 x 1.12 x 0.34 m	3.4 x 1.12 x 0.46 m
Mount	0.66 x 0.62 x 0.23	0.88 x 0.88 x 0.18	0.88 x 0.88 x 0.24	1.2 x 1.2 x 0.35	1.24 x 0.77 x 0.53 m	1.24 x 0.77 x 0.53 m
Support	1.3 x 0.05 x 0.05	1.7 x 0.05 x 0.05	2.07 x 0.05 x 0.06	2.45 x 0.10 x 0.14		
Total Volume:						
Reflector	0.203m ³	0.25m ³	0.453m ³	0.714m ³	1.05m ³	1.75m ³
Mount	0.094m ³	0.139m ³	0.186m ³	0.5m ³	0.51m ³	0.51m ³
Support	0.003m ³	0.004m ³	0.047m ³	0.034m ³		