

UHF Broadband Antenna

420-520MHz

CSA40-67-P



The CSA Series arrays are based on the popular OA Series dipole array antennas. Supplied in “kit” form these antennas are delivered in flatpack packaging to minimise freight and warehousing issues and allow for simplified assembly at time of installation.

These Arrays feature the same solid construction as the standard array series. The folded dipoles utilise an internal phasing harness in PTFE based double screened coaxial cable with a polyethylene jacket. The screens themselves are also made of fully welded aluminum to assist in minimising PIM.

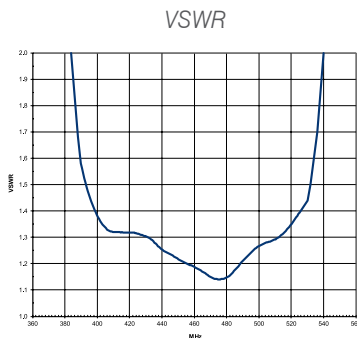
With all welded construction and superior internal harness construction the antennas provide not only excellent radiation characteristics but also defined, high levels of intermodulation and noise suppression. The entire array rests at ground potential and offers the ultimate in lightning resistant antennas.

Features:

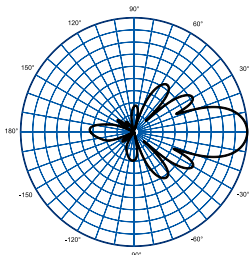
- Offset(cardioid) pattern with 70 degree nominal horizontal Beamwidth
- High front to back ratio to allow frequency re-use by tailoring coverage areas
- Hermetically sealed internal PTFE based phasing harness capable of 500W continuous operation
- Shipped unassembled for ease of handling, easily assembled on site
- Direct DC grounded for lightning protection and reduction of precipitation static noise
- Industry leading PIM ratings (-140dBc) providing low IM and low noise characteristics



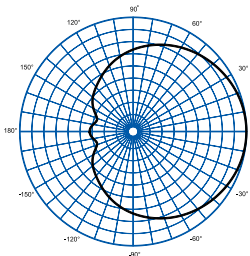
Technical Specifications



Typical E Plane



Typical H Plane



Model Number	CSA10-67-P	CSA20-67-P	CSA40-67-P
Nominal Gain dBi (dBd)	9.1 (7)	11.1 (9)	13.2 (11)
Frequency MHz	406-512		420-520
Tuned Bandwidth MHz	Full band		
VSWR (Return Loss)	<1.5:1 (14dB)		
Impedance Ω	50		
E Plane Beamwidth°	71	35	17
H Plane Beamwidth°	70	69	70
Front / Back Ratio dB	22	25	28
Polarisation	Vertical		
Input Power W	500		
Passive IM 3rd order (2x20W) dBc	<-140		

Mechanical Specifications

Model Number	CSA10-67-P	CSA20-67-P	CSA40-67-P	
Construction	Welded Aluminium. Alodine finish			
Length mm	500	1000	2000	
Weight kg	6	19	32	
Suggested Clamping	Clamps included to suite pole diam. 60-90mm			
Termination	4.3 - 10 female			
Projected area cm ²	No Ice	2704	5940	15334
	With ice	4600	9791	24557
Wind Load (Thrust) 160km/h N	No Ice	320	704	1817
	With ice	545	1160	2910
Wind Gust Rating km/h	No Ice	>240		
	With ice	192	197	>240

Complete Array Part No.	CSA10-67-P	CSA20-67-P	CSA40-67-P
Antenna Only Part No.	SMD4-67-P	OA20-67-P	OA40-67-P
Screen Only Part No.	M-8571	M-8564	M-8565