

HORWIN AD series is a single or dipole array wide band VHF/UHF antennas for extensive range of applications – trunking radio systems, military communications, dispatch base stations, amateur radio repeaters, etc.

Dipole incorporates “balun” matching circuit optimized for wide bandwidth and accurate matching. More gain is achieved by coupling single folded dipoles into arrays. Dipoles in array are coupled by precision phasing cable harness keeping low SWR and minimum insertion losses.

The horizontal radiation pattern is adjusted by changing the distance between dipole elements and supporting mast.

All antenna parts are made of AD31 (T6063) aluminium and covered with black polymer powdered coating which resists water and ice buildup, and provides exceptional protection from corrosive gases, UV radiation, salt spray, acid rain and windblown abrasives. The boom is mounted to the mast (Ø 30-55 mm) through the omega clamp with U-bolts. All components of dipole element are DC-grounded for better lightning and antistatic protection.

The phasing cable harness is fully waterproof and protected against hostile environments. Feed cable terminates with N type female connector, nominal impedance–50 Ohm.



Horwin AD160

Horwin AD450

AD xx xx	Antenna dipole band (16=160, 45=450MHz) number of elements								
			1	2	4	1	2	4	8
Frequency range, MHz			136 – 176			400 – 470			
Bandwidth @ SWR < 1,5, MHz			40			70			
Elements			1	2	4	1	2	4	8
Gain, dBd (1/4 λ dipole to mast spacing)			0	3	6	0	3	6	9
Gain, dBd (3/8 λ dipole to mast spacing)			3	5,6	9	3	5,6	9	12
Power rating, W			200			200			
Overall dimensions, mm		H	900	2200	4800	450	100	2200	4600
3/8λ spacing		D	1100	1100	1100	550	550	550	550
Weight (aprox.), kg			2,8	5,9	11,5	2	3,2	7,2	14,5
Impedance, Ohm			50						
Termination						N- female			
Vertical beamwidth (3/8 spacing)			70°	38°	19°	70°	37°	19°	9°
Max. exposed area, m²			0,07	0,14	0,29	0,028	0,056	0,112	0,225
Lateral thrust at 45 m/s, H			80	165	335	32	64	128	256
Lightning protection			CD Ground						
Rated wind velocity, m/s			45			55			
Rated wind velocity with 0.5" icing, m/s			28			28			