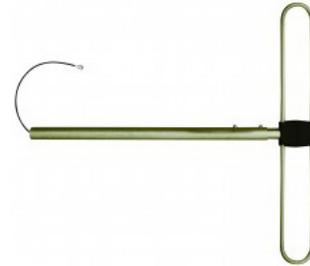


# VHF Low PIM Side Mounted Dipole Antennas

66-200 MHz  
SMD10 & SMD20 Series

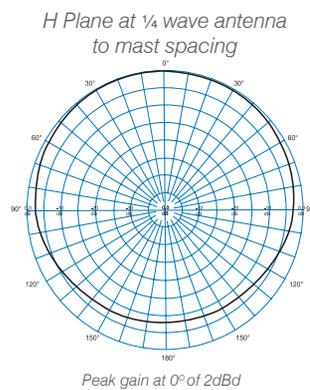
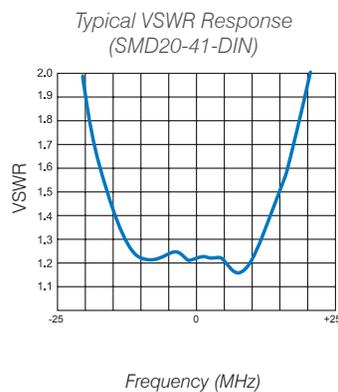


The SMD10-28 and SMD20 Series side mounted dipoles are Low PIM broad band antennas which, through different phasing and mounting arrangements can offer a variety of patterns (generally cardioid) tailored to specific coverage requirements. These antennas can be mounted in dual arrays for 3dB gain, or four-stack arrays for 6dB gain over a single dipole.



## Features:

- Can be phased to provide 3 dBd or 6 dBd gain, in a variety of patterns tailored to suit specific requirements. An extensive range of phasing harnesses available.
- Full bandwidth coverage for both single antennas and phased arrays - ideal in community sites
- DC grounded for lightning protection and dissipation of static noise
- -150dBc Passive Intermodulation (PIM) rating



## Electrical

Model Number	SMD10-28	SMD20-36	SMD20-41-DIN
Nominal Gain dBi (dBd)	Nominally 2 (Unity) but varies with mounting arrangements		
Frequency MHz	70 - 85	130-150	148 - 174
Tuned Bandwidth	Entire band		
VSWR (Return Loss)	<1.5 :1 (14dB)		
Nominal Impedance $\Omega$	50		
Vertical Beamwidth°	Typically 76 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing	Typically 85 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing	Typically 70 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing
Horizontal Beamwidth°	Typically 211 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing	Typically 228 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing	Typically 175 at $\frac{1}{4}$ $\lambda$ antenna - mast spacing
Passive IM 3rd order dBc	-150		
Input Power W	750	750	500

## Mechanical

Model Number	SMD10-28	SMD20-36	SMD20-41	
Construction	Welded aluminium with alodined finish			
Length m	1.75	1.24	0.8	
Weight kg	3.5	3	1	
Termination	N female with 9142 cable tail		7/16 DIN female with 9142 cable tail	
Mounting Area	500mm x 48mm diam.		100mm x 40mm diam.	
Suggested Clamps	1 x UCR1 or UCR2			
Projected Area cm <sup>2</sup>	No ice	1617	868	654
	With ice	3103	1523	1183
Wind Load (Thrust) @ 160km/h N	No ice	192	103	77
	With ice	368	181	140
Wind Gust Rating km/h	>240			
Torque @ 160 km/h Nm	No ice	72	28	14
	With ice	138	150	25