

VHF Low PIM Side Mounted Dipole Antennas

66-200 MHz

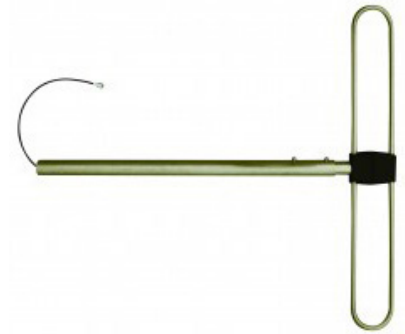
SMD10 & SMD20 Series



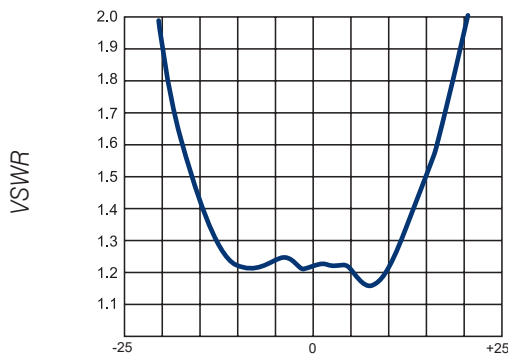
The SMD10 and SMD20 Series side mounted dipoles are Low PIM broad band antennas which, through different phasing and mounting arrangements can offer a variety of patterns (generally cardioid) tailored to specific coverage requirements. These antennas can be mounted in dual arrays for 3dB gain, or four-stack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

Key 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

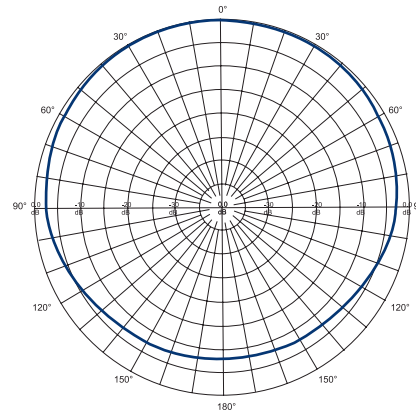


Typical VSWR Response (SMD20-41P)



Frequency (MHz)

H Plane at 1/4 wave antenna to mast spacing



Electrical Specifications

Model Number	SMD10-28-P	SMD20-35-P	SMD20-36-P	SMD20-41-P
Nominal Gain dBi (dBd)	Nominally 2 (Unity) but varies with mounting arrangements			
Frequency MHz	70-85	118-137	130-150	148-174
Tuned Bandwidth MHz	Entire band			
VSWR	<1.5:1 (14dB)			
Nominal Impedance Ω	50			
Vertical Beamwidth°	Typically 76 at 1/4 wave antenna - mast spacing	Typically 80 at 1/4 wave antenna - mast spacing	Typically 85 at 1/4 wave antenna - mast spacing	Typically 70 at 1/4 wave antenna - mast spacing
Horizontal Beamwidth°	Typically 211 at 1/4 wave antenna - mast spacing	Typically 215 at 1/4 wave antenna - mast spacing	Typically 228 at 1/4 wave antenna - mast spacing	Typically 175 at 1/4 wave antenna - mast spacing
Passive IM 3rd order dBc	-150			
Input Power W	750			

Mechanical Specifications

Model Number	SMD10-28-P	SMD20-35-P	SMD20-36-P	SMD20-41-P	
Construction	Welded aluminium with alodined finish				
Length m	1.75	1.34	1.24	0.8	
Weight kg	3.5	3	3	1	
Termination	4.3-10 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 ²	No Ice	1617	1185	868	654
	With Ice	3103	2014	1523	1183
Wind Load (Thrust) @ cm ² (ft ²)	No Ice	192	140	103	77
	With Ice	368	239	181	140
Wind Gust Rating km/h	> 240				
Torque @ 160 km/h Nm	No Ice	72	24	28	14
	With Ice	138	40	50	25