

VHF Side Mounted Dipole Antenna

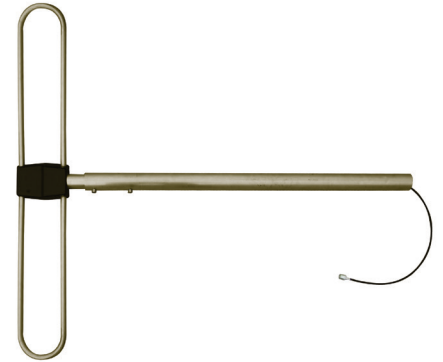
130-150MHz & 148-174 MHz

The SMD series of side mount dipole antennas provide broad operating bandwidth and are recommended for local area coverage or short haul RF link applications.

The SMD series are manufactured using all welded aluminum construction. The feed point is protected by an ABS cap, with the internal PTFE based cable construction providing excellent intermodulation performance (-150dBc).

The antenna is internally DC grounded for lightning protection and the reduction of precipitation static noise.

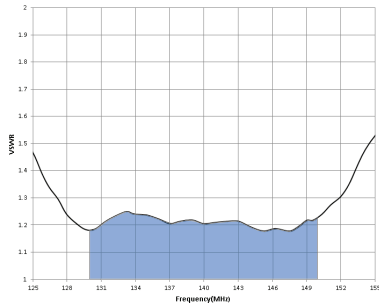
- Provides either directional or largely omnidirectional radiation pattern
- All welded aluminum construction with RoHS compliant corrosion protection
- Full band coverage from a single antenna for local coverage or control station applications
- Industry leading PIM ratings providing low IM and low noise characteristics for optimum performance
- Extension boom design reduces shipping dimensions



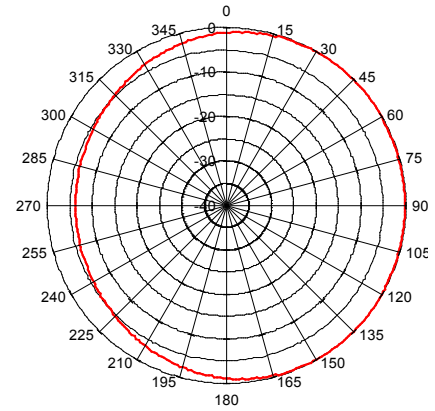
Electrical Specifications		
Model Number	SMD20-36	SMD20-41
Nominal Gain <i>dBd</i>	Unity (but varies with mounting arrangements)	
Frequency <i>MHz</i>	130-150	148-174
Tuned Bandwidth <i>MHz</i>	Entire Band	
VSWR (Return Loss)	< 1.5:1 (14dB)	
Nominal Impedance Ω	50	
Vertical Beamwidth	Typically 85° at ¼ λ antenna - mast spacing	Typically 70° at ¼ λ antenna - mast spacing
Horizontal Beamwidth	Typically 228° at ¼ λ antenna - mast spacing	Typically 175° at ¼ λ antenna - mast spacing
Input Power (<i>Watts</i>)	750	
Passive IM 3rd order (<i>2x20W</i>) <i>dBc</i>	-150	

Mechanical Specifications			
Model Number	SMD20-36	SMD20-41	
Construction & Configuration	Welded aluminum with alodine finish		
Dimensions <i>inches</i>	37.8 high by 50 long	31.3 high by 50 long	
Weight <i>lbs</i>	6.6		
Shipping Weight <i>lbs</i>	8.8		
Shipping Dimensions <i>inches</i>	H	3	
	W	20	
	L	40	
Termination	N Female with short 9142 cable tail		
Mounting Area	19.7" x 1.9" diam. aluminum		
Suggested Clamps (Not Included)	1 x UCR1		
Projected Area <i>ft²</i>	No ice	0.93	0.7
	With Ice	1.64	1.27
Wind Load (Thrust) @ 100mph <i>lbs</i>	No Ice	23.15	17.31
	With Ice	40.68	31.47
Wind Gust Rating <i>mph</i>	>149		
Torque @ 100mph <i>ft-lbs</i>	No Ice	20.65	10.32
	With ice	36.87	18.44

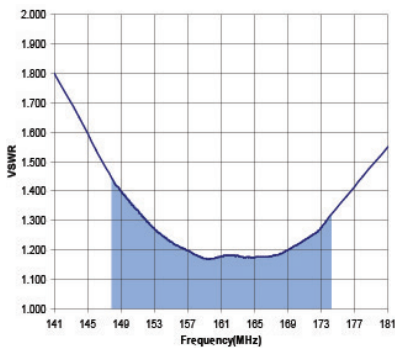
Typical VSWR response SMD20-36



SMD20-36 H Plane at 1/4 wave antenna to mast spacing



Typical VSWR response SMD20-41



SMD20-41 H Plane at 1/4 wave antenna to mast spacing

