

SD210R-SF2P120LDF(D006) PIM VHF reflector, 120 degrees beamwidth, 138-174MHz

- 120 degrees horizontal beamwidth for VHF simulcast applications
- Single bay dipole with 4.5 dBd of gain
- Broadband operation, covering 138-174 MHz full band
- Unique design for low passive intermodulation

The SD210R-L series antenna is a rugged exposed dipole antenna with corner reflector which covers the entire 138-174 MHz range. Because of its broadband operation, it is an excellent antenna for multicoupling several systems or for use with widely spaced duplex frequencies. 60, 90 or 120 degrees horizontal beamwidth available for different sectorized coverages.

One, two or four bay stacked dipoles are available for different gains. The reflectors are two separate flat screens which can be disassembled for shipping and assembled on site conveniently.

This antenna is to be side mounted only. Please order the antenna with proper beamwidth and gain for your system using model numbers given in the following application notes.



**Application Notes**

- Model number SD210R-SF2PALDF-One dipole, beamwidth:  
A=60, 60 degrees  
A=90, 90 degrees  
A=120, 120 degrees
- Model number SD212R-SF2PALDF-Two bay dipoles, beamwidth:  
A=60, 60 degrees  
A=90, 90 degrees  
A=120, 120 degrees
- Model number SD214R-SF2PALDF-Four bay dipoles, beamwidth:  
A=60, 60 degrees  
A=90, 90 degrees  
A=120, 120 degrees



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Product Specification Sheet EPR 018378		SD210R-SF2P120LDF(D00S)	Issue: 1	Dated: 22-03-11 Dated: 18-11-08

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**Electrical Specifications**

Frequency Range	MHz	138 to 174
Gain (nominal)	dBi (dBd)	6.6 (4.5)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	$\Omega$	50
Pattern		Directional
Horizontal beamwidth (typ)	degrees	120
Vertical beamwidth (typ)	degrees	72
Average Power Input (max)	W	300
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
Lightning protection		DC ground
Bandwidth	MHz	36
Front-to-back ratio (typ)	dB	17

**Notes**

\*1 : Shipped in two boxes.

**Ordering Information**

Please contact Sinclair CSR to order mounting clamps.

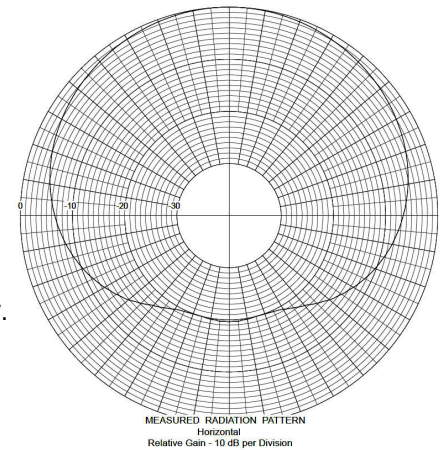
**Mechanical Specifications**

Connector		7/16 DIN (female)
Length/ Height	mm (in)	1524 (60)
Width	mm (in)	1143 (45)
Depth	mm (in)	605 (23.8)
Base pipe diameter	mm (in)	48 (1.9)
Base pipe material		aluminum
Weight	kg (lbs)	15.07 (33.2)
Weight iced	kg (lbs)	34.19 (75.3)
Mounting information		#6A clamps recommended. Order separately.
Shipping dimensions	mm (in)	1676x152x1219 (66x6x48) *1

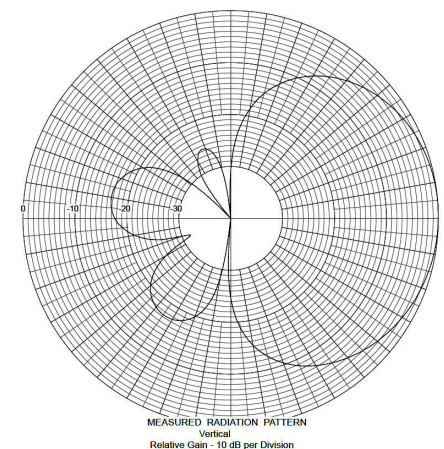
**Environmental Specifications**

Temperature range	$^{\circ}\text{C}$ ( $^{\circ}\text{F}$ )	-40 to +60 (-40 to +140)
Wind Loading Area (Flat Plate Equivalent)	$\text{m}^2$ ( $\text{ft}^2$ )	0.31 (3.37)
Wind Loading Area (ice)	$\text{m}^2$ ( $\text{ft}^2$ )	0.55 (5.9)
Rated wind velocity (no ice)	km/h (mph)	290 (180)
Rated wind velocity (1/2" radial ice)	km/h (mph)	209 (130)
Lateral thrust (100mph)	N (lbs)	529.3 (119)
Torsional moment	Nm (ft-lbs)	145.8 (108)

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