

SC272-SF1SNF

Collinear omni antenna, 0 dBd gain, 118-137 MHz

- Designed for aviation service under extreme conditions
- PVC radome
- Light weight

The SC272 is a lightweight, collinear antenna constructed of high strength fiberglass with an aluminum coaxial skirt and base pipe. The combined features of light weight, unity gain, and low cost make this antenna a natural choice for moderate base station antenna requirements. Mounting clamps are provided for parallel mounting to a minimum 1.9 inch diameter support pipe.



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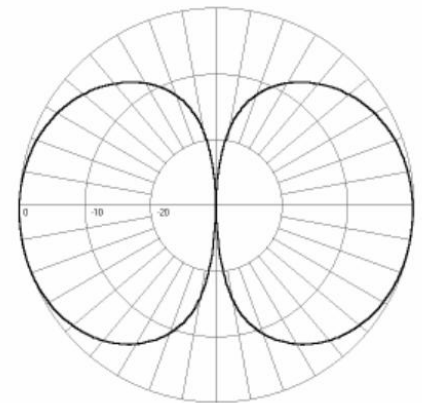
Region	United States, South & Central America	Europe, Middle East and Africa	Canada and rest of the world
Telephone	USA: 1 800 288 2763 International: +1 716 874 3682	International: +44 (0) 1223 42 03 03	Canada: 1 800 263 3238 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salescan@sinctech.com

Electrical Specifications

Bandwidth	MHz	19
Frequency range	MHz	118 to 137
Gain	dBi (dBd)	2.1 (unity)
Pattern		omnidirectional
Input VSWR (max)		2:1
Polarization		vertical
Vertical beamwidth	degrees	85
Electrical tilt	degrees	0
Average power input (max)	W	250 Watts
Impedance	Ω	50
Lightning protection		DC ground

Mechanical Specifications

Length	mm (in)	1664 (65.5)
Depth	mm (in)	64 (2.5)
Width	mm (in)	64 (2.5)
Connector		N (female)
Weight	kg (lbs)	2.8 (6.1)
Weight iced	kg (lbs)	5.4 (12)
Mounting hardware		#5 clamp
Shipping dimensions		75x4x4 in
Shipping weight	kg (lbs)	11.4 (25)



Elevation

Environmental Specifications

Survival wind velocity (no ice)	km/h (mph)	266 (165)
Survival wind velocity (1/2" radial ice)	km/h (mph)	209 (130)
Rated wind velocity (no ice)	km/h (mph)	217 (135)
Rated wind velocity (1/2" radial ice)	km/h (mph)	185 (115)
Tip deflection	degrees	3.8
Projected area (no ice)	m ² (ft ²)	0.6 (0.6)
Projected area (ice)	m ² (ft ²)	0.8 (0.9)
Lateral thrust (100mph)	N (lbs)	102.3 (23)
Bending moment	Nm (ft-lbs)	72.9 (54)
Temperature range	$^{\circ}$ C ($^{\circ}$ F)	-40 to +60 (-40 to +140)

SC6172

Aviation band antenna, 1 dBd gain, dual, HD, 118-137 MHz

(SRL6172)

- Ideal for severe weather conditions at airports
- Dual antenna for redundancy
- Available with bird resistant cap

Fabricated using lightweight rugged components to insure easy installation while providing superior resistance to harsh environmental conditions. These antennas provide reliable omnidirectional coverage.



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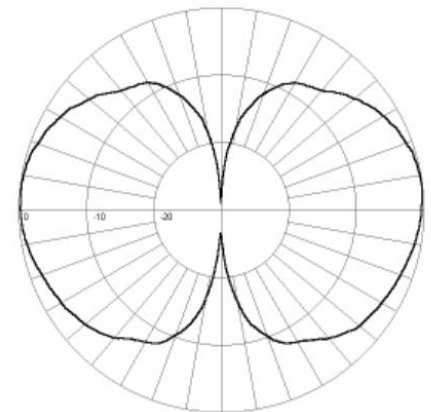
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Electrical Specifications

Frequency range	MHz	118 to 137
Gain	dBi (dBd)	1 (-1.1)
Pattern		omnidirectional
Input VSWR (max)		2:1
Polarization		vertical
Vertical beamwidth	degrees	75
Lightning protection		DC ground

Mechanical Specifications

Length	mm (in)	3791 (149.3)
Width	mm (in)	89 (3.5)
Connector		N (female)
Weight	kg (lbs)	17.3 (38)
Weight iced	kg (lbs)	74.9 (165)
Base pipe diameter	mm (in)	102 (4)
Shipping dimensions		160x5x5 in
Shipping weight	kg (lbs)	29.5 (65)



Elevation

Environmental Specifications

Survival wind velocity (no ice)	km/h (mph)	354 (220)
Survival wind velocity (1/2" radial ice)	km/h (mph)	242 (150)
Tip deflection	degrees	0.6
Projected area (no ice)	m ² (ft ²)	2.2 (2.4)
Projected area (ice)	m ² (ft ²)	4.3 (4.6)
Lateral thrust (100mph)	N (lbs)	427 (96)
Bending moment	Nm (ft-lbs)	742.5 (550)
Temperature range	°C (°F)	-40 to +60 (-40 to +140)

SD212-SF1P2SNM

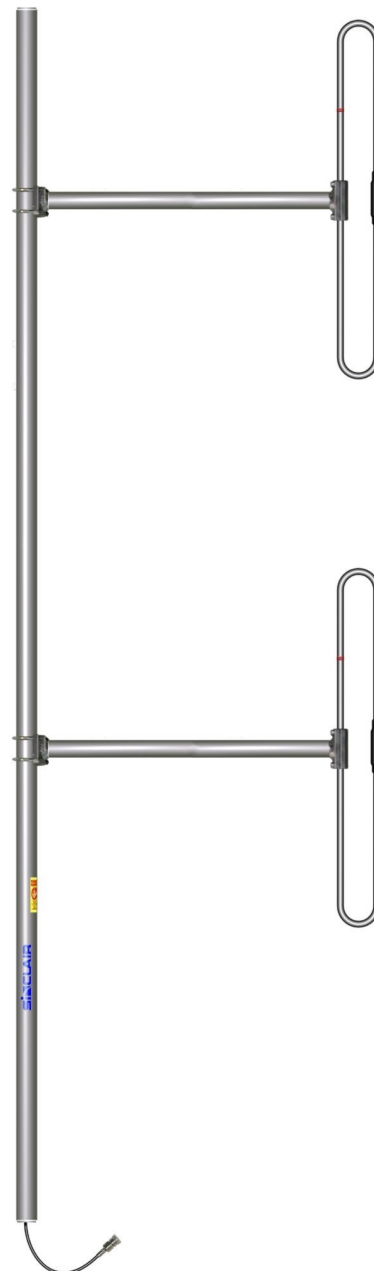
2 dipole antenna, 5.0 dBd gain, elliptical, 118-138 MHz

- 2-bay dipole that covers the 118-138 MHz band
- 5.0 dBd gain in elliptical (bi-directional) pattern, (1/2 wave configuration)
- 300 W power handling

The SD212 series is an extremely rugged 2-bay exposed dipole antenna designed for applications where moderate gain is required. These premium-quality antennas are well suited to public safety/public security applications.

The design of these antennas provides for coverage between 118 to 225 MHz in 3 sub bands, 118-138MHz for civil aviation applications, 138-174MHz for private mobile networks, public safety and public security and 220-225MHz for transportation networks.

The standard connector offerend is N male which is terminated on a 1 foot cable. Clamps are not included but recommended is the set of #130 clamps.



Application Notes

- The SD212 is available in half-wave configuration (P2) providing 5.0 dBd gain in a bidirectional pattern, and a quarter-wave configuration (P4) providing a 5.5 dBd gain in an offset pattern (gain varies slightly with frequency).
- Sub bands:
118-138 MHz (F1)
138-174 MHz (F2)
220-225 MHz (F3)
- For lower gain applications the SD210 single dipole configuration is available, for higher gain, the SD214, 4 dipole configuration is available. For medium gain applications the SD212 is ideal.
- SD212-SF2P4SNM specifications are shown at the series level

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Electrical Specifications

Frequency range	MHz	118 to 138	*1
Gain	dBi (dBd)	7.1 (5)	*2
Pattern		bi-directional	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Horizontal beamwidth	degrees	210	
Vertical beamwidth	degrees	34	
Average power input (max)	W	300 Watts	
Lightning protection		DC ground	

Notes

- *1 : 118-225MHz in 3 sub bands.
- *2 : 5.0dBd in bidirectional config.
- *3 : Recommend Clamp #130

Ordering Information

2 x #130 clamps recommended (not included).

Mechanical Specifications

Height	mm (in)	3658 (144)	
Depth	mm (in)	48 (1.9)	
Width	mm (in)	1187 (46.8)	
Connector		N (male)	
Weight	kg (lbs)	11.4 (25)	
Base pipe diameter	mm (in)	48 (1.9)	
Base pipe mounting length	mm (in)	965 (38)	
Mounting hardware		clamps not supplied	*3
Shipping dimensions		146x4x48	
Shipping weight	kg (lbs)	22.7 (50)	

Environmental Specifications

Survival wind velocity (no ice)	km/h (mph)	185 (115)
Survival wind velocity (1/2" radial ice)	km/h (mph)	137 (85)
Tip deflection	degrees	6
Rated radial ice	mm (in)	13 (0.5)
Projected area (no ice)	m ² (ft ²)	2.3 (2.5)
Projected area (ice)	m ² (ft ²)	4.1 (4.5)
Lateral thrust (100mph)	N (lbs)	409.2 (92)
Torsional moment	Nm (ft-lbs)	160.7 (119)
Bending moment	Nm (ft-lbs)	518.4 (384)