Antennas
Low Band, Aviation, and VHF Antennas
SD212 Series

SD212-SF2P2SNM(DXX) 2 dipole, 5.0 dBr, bi-directional, 138-174 MHz

Also referred as: SRL210C2NM*2-2

- Covers the entire 138-174 MHz frequency range
- 5.0 dBr gain with bi-directional pattern
- 300 Watt power handling
- Can be top or side mounted (Universal mount)


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

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

The standard connector offered is N-male which is terminated on a 1 foot cable.

When ordering, please refer to the chart below for the model number. Downtiltil configurations are subject to various list price. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Downtilt</th>
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<tbody>
<tr>
<td>SD212-SF2P2SNM(D00)</td>
<td>0º</td>
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<tr>
<td>SD212-SF2P2SNM(D02)</td>
<td>2º</td>
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<tr>
<td>SD212-SF2P2SNM(D04)</td>
<td>4º</td>
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<tr>
<td>SD212-SF2P2SNM(D06)</td>
<td>6º</td>
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<tr>
<td>SD212-SF2P2SNM(D08)</td>
<td>8º</td>
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<td>SD212-SF2P2SNM(D10)</td>
<td>10º</td>
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Application Notes

- The SD212 is available with a bi-directional pattern (P2) providing 5.0 dBr gain or with an offset pattern (P4) providing a 5.5 dBr gain (gain varies slightly with frequency).

- Sub bands:
  - 118-138 MHz (F1)
  - 138-174 MHz (F2)
  - 190-225 MHz (F3)
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Electrical Specifications

- Frequency Range: 138 to 174 MHz
- Bandwidth: 36 MHz
- Connector: N-Male
- Gain (nominal): 5 (7.1) dBd (dBi)
- Input VSWR (max): 1.5:1
- Polarization: vertical
- Impedance: 50 Ω
- Pattern: Bi-directional
- Vertical beamwidth (typ): 34 degrees
- Average Power Input (max): 300 W
- Lightning protection: DC ground
- Electrical tilt (available): 0, 2, 4, 6, 8, or 10 degrees

Mechanical Specifications

- Width: 40 (1016) in (mm)
- Depth: 3 (76) in (mm)
- Length/Height: 120 (3048) in (mm)
- Base pipe diameter: 1.9 (48) in (mm)
- Base pipe mounting length: 36 (914) in (mm)
- Radiating element material: aluminum
- Base pipe material: aluminum
- Weight: 22.5 (10.22) lbs (kg)
- Weight iced (1/2" ice): 55 (24.97) lbs (kg)
- Recommended For Offset Side Mount: SMK-125-A3 or SMK-125-A7
- Mounting configurations: Universal Mount
- Actual shipping weight: 45 (20.43) lbs (kg)
- Shipping dimensions: 124x48x6 (3150x1219x152) in (mm)

Environmental Specifications

- Temperature range: -40 to +140 (-40 to +60) °F (°C)
- Wind Loading Area (Flat Plate Equivalent): 2.14 (0.2) ft² (m²)
- Wind Loading Area (1/2" ice): 3.71 (0.34) ft² (m²)
- Rated wind velocity (no ice): 140 (225) mph (km/h)
- Rated wind velocity (1/2" radial ice): 105 (169) mph (km/h)
- Lateral Thrust (100 mph No Ice): 77 (342.5) lbs (N)
- Torsional moment (100 mph No Ice): 83 (112.1) ft-lbs (Nm)
- Bending moment (100 mph No Ice): 247 (333.5) ft-lbs (Nm)
- Tip deflection (100 mph No Ice): 1.02 degrees

Ordering Information

Clamps must be ordered separately.
When ordering, please refer to the model list on the previous page for specific model numbers and downtilt configurations.

Notes
*1 : Qty 2 required

Sinclair’s commitment to product leadership may result in improvement or change to this product.

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