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## SD214

4 dipole antenna, 8.0/8.5 dBd gain, 118-225 MHz

- Covers 118-225 MHz in 3 band splits
- 8.0 dBd gain in elliptical (bi-directional) pattern (1/2 wave), 8.5 dBd gain in offset pattern (1/4 wave)
- 250W power handling
- Recommend using an SMK-125-A7 side mounting kit

The SD214 series is a rugged 4-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, 118-138 MHz for civil aviation applications, 138-174 MHz for private mobile networks, public safety and public security and 220-225 MHz for transportation networks.

The standard connector offered is an N-type male.

### Application Notes

- SD214-SF2P4SNM specifications are shown at the series level

Model	Description	Pattern
<a href="#">SD214-SF1P2SNM</a>	8.0 dBd gain, elliptical, N (male) connector, 118-138 MHz	Bi-directional
<a href="#">SD214-SF1P4SNM</a>	8.5 dBd gain, offset, N (male) connector, 118-138 MHz	Offset
<a href="#">SD214-SF2P2SNM(D00S-ABK)</a>	8.0 dBd gain, elliptical, N(male), side mount, black, 138-174 MHz	Bi-directional
<a href="#">SD214-SF2P2SNM(D08)</a>	8.0 dBd gain, elliptical, 8° DT, N (male) connector, 138-174 MHz	Bi-directional
<a href="#">SD214-SF2P2SNM(D0B)</a>	8.0 dBd gain, elliptical, N (male) connector, 138-174 MHz	Bi-directional
<a href="#">SD214-SF2P2SNM(D0S)</a>	8.0 dBd gain, elliptical, N (male) connector, 138-174 MHz	Bi-directional
<a href="#">SD214-SF2P4SNM</a>	8.5 dBd gain, offset, N (male) connector, 138-174 MHz	Offset
<a href="#">SD214-SF2P4SNM(D00S-ABK)</a>	8.5 dBd gain, offset, N(male), side mount, black, 138-174 MHz	Offset
<a href="#">SD214-SF3P2SNM</a>	8.0 dBd gain, elliptical, N (male) connector, 216-225 MHz	Bi-directional
<a href="#">SD214-SF3P4SNM</a>	8.5 dBd gain, offset, N (male) connector, 195-245 MHz	Offset



1/4 wave shown

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1223 42 03 03	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		SD214		Dated: 05-02-10

[SD214-SF1P2SNM](#)

[SD214-SF1P4SNM](#)

[SD214-SF2P2SNM\(D00S-ABK\)](#)

[SD214-SF2P2SNM\(D08\)](#)

**Electrical Specifications**

Frequency Range, MHz	118 to 138	118 to 138	138 to 174	138 to 174
Gain (nominal), dBd (dBi)	8 (10.1)	8.5 (10.6)	8 (10.1)	8 (10.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Bi-directional	Offset	Bi-directional	Bi-directional
Horizontal beamwidth, degrees		210		
Vertical beamwidth, degrees	17	17	17	17
Average Power Input (max), W	300	300	300	300
Lightning protection	DC ground	DC ground	DC ground	DC ground
Electrical tilt (available)	0	0	0	8

**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	240 (6096)	240 (6096)	240 (6096)	240 (6096)
Width, in (mm)	40 (1016)	23 (584)	40 (1016)	40 (1016)
Depth, in (mm)	4 (102)	4 (102)	4 (102)	4 (102)
Base pipe diameter, in (mm)	2.4 (60)	2.4 (60)	2.4 (60)	2.4 (60)
Base pipe mounting length, in (mm)	72 (1829)	72 (1829)	72 (1829)	72 (1829)
Weight, lbs (kg)	48 (21.8)	45.5 (20.7)	48 (21.8)	48 (21.8)
Actual Shipping weight, lbs (kg)	65 (29.5)	65 (29.5)	65 (29.5)	65 (29.5)
Shipping dimensions, in (mm)	247x6x44 (6274x152x1118)	247x6x44 (6274x152x1118)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)
FPE, ft² (m²)	4.51 (0.42)			
Mounting hardware	clamps not supplied	clamps not supplied	clamps not supplied	clamps not supplied

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[SD214-SF2P2SNM\(D0B\)](#)

[SD214-SF2P2SNM\(D0S\)](#)

[SD214-SF2P4SNM](#)

[SD214-SF2P4SNM\(D00S-ABK\)](#)

**Electrical Specifications**

Frequency Range, MHz	138 to 174	138 to 174	138 to 174	138 to 174
Gain (nominal), dBd (dBi)	8 (10.1)	8 (10.1)	8.5 (10.6)	8.5 (10.6)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Bi-directional	Bi-directional	Offset	Offset
Horizontal beamwidth, degrees	210		210	210
Vertical beamwidth, degrees	17	17	17	17
Average Power Input (max), W	300	300	300	300
Lightning protection	DC ground	DC ground	DC ground	DC ground
Electrical tilt (available)	0	0	0	0

**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	240 (6096)	240 (6096)	240 (6096)	240 (6096)
Width, in (mm)	40 (1016)	40 (1016)	23 (584)	23 (584)
Depth, in (mm)	4 (102)	4 (102)	4 (102)	4 (102)
Base pipe diameter, in (mm)	2.4 (60)	2.4 (60)	2.4 (60)	2.4 (60)
Base pipe mounting length, in (mm)	72 (1829)	72 (1829)	72 (1829)	72 (1829)
Weight, lbs (kg)	48 (21.8)	48 (21.8)	45.5 (20.7)	45.5 (20.7)
Actual Shipping weight, lbs (kg)	65 (29.5)	65 (29.5)	65 (29.5)	125 (56.8)
Shipping dimensions, in (mm)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)
FPE, ft <sup>2</sup> (m <sup>2</sup> )				
Mounting hardware	clamps not supplied	clamps not supplied	clamps not supplied	clamps not supplied

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SD214-SF3P2SNM

SD214-SF3P4SNM

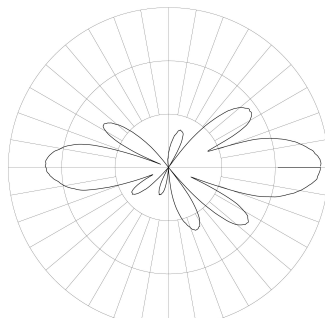
**Electrical Specifications**

Frequency Range, MHz	216 to 225	195 to 245
Gain (nominal), dBd (dBi)	8 (10.1)	8.5 (10.6)
Input VSWR (max)	1.5:1	1.5:1
Polarization	vertical	vertical
Pattern	Bi-directional	Offset
Horizontal beamwidth, degrees		210
Vertical beamwidth, degrees	18	17
Average Power Input (max), W	250	250
Lightning protection	DC ground	DC ground
Electrical tilt (available)	0	0

**Mechanical Specifications**

Connector	N (male)	N (male)
Length/ Height, in (mm)	180 (4572)	180 (4572)
Width, in (mm)	6 (152)	23 (584)
Depth, in (mm)	31 (787)	4 (102)
Base pipe diameter, in (mm)	2.4 (60)	2.4 (60)
Base pipe mounting length, in (mm)	40 (1016)	72 (1829)
Weight, lbs (kg)	42 (19.1)	45.5 (20.7)
Actual Shipping weight, lbs (kg)	60 (27.2)	60 (27.2)
Shipping dimensions, in (mm)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)
FPE, ft <sup>2</sup> (m <sup>2</sup> )		
Mounting hardware	clamps not supplied	clamps not supplied

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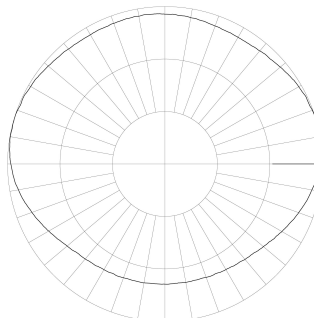


MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Elevation  
Relative Gain - 10 dB per Division

SD214-SF1P2SNM

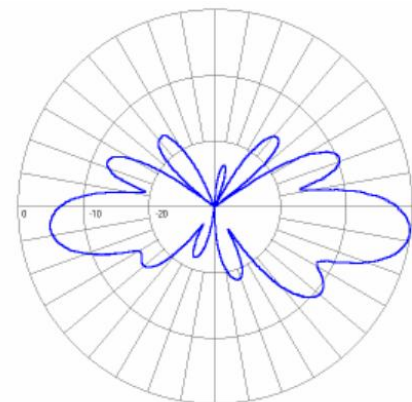
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MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Azimuth  
Relative Gain - 10 dB per Division

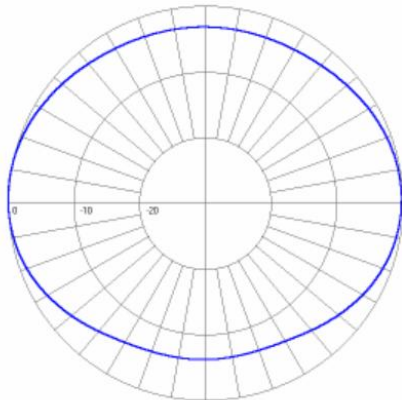
SD214-SF1P2SNM



Elevation

SD214-SF2P2SNM(D08)

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Azimuth

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