

SD214-HL - PIM Certified 4 dipole antenna, 7.0/7.5 dBd gain, low PIM, HD, 118-225 MHz

- Industry-leading -150dBc PIM rating, covering 118-225 MHz in 3 band splits
- 7.0 dBd gain in bi-directional pattern (1/2 wave), and 7.5 dBd gain in the offset pattern (1/4 wave)
- Heavy duty version with 300W power handling

The SD214-HL series is a heavy duty, low intermod, extremely 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 SD214-HL is also a high-performance low PIM dipole antenna which uses industry-leading designs that offer high gain, excellent bandwidth and high reliability. The standard connector offered is 7/16" DIN female.

Clamps are not included.

Model	Description	Pattern
SD214-HF1P2LDF	7.0 dBd gain, elliptical, 7/16 DIN (female) connector, 118-138 MHz	Bi-directional
SD214-HF1P4LDF	7.5 dBd gain, offset, 7/16 DIN (female) connector, 118-138 MHz	Offset
SD214-HF2P2LDF	7.0 dBd gain, elliptical, 7/16 DIN (female) connector, 138-174 MHz	Bi-directional
SD214-HF2P3LDF(D00S-LSABK)	7.2 dBd gain, bidirectional, 7/16 connector, lightning spike, black, 138-174 MHz	3/8 wave
SD214-HF2P4LDF	7.5 dBd gain, offset, 7/16 DIN (female) connector, 138-174 MHz	Offset
SD214-HF2P4LDF(D00S-LSABK)	7.5 dBd gain, offset, 7/16 DIN (female), lightning spike, black, 138-174 MHz	Offset
SD214-HF3P2LDF	7.0 dBd gain, elliptical, 7/16 DIN (female) connector, 190-225 MHz	Bi-directional
SD214-HF3P4LDF	7.5 dBd gain, offset, 7/16 DIN (female) connector, 190-225 MHz	Offset



Standard SD214-L model shown.



Australian Representatives
ROJONE, PTY LTD.
Tel: 02 9829 1555
E: sales@rojone.com.au
www.rojone.com.au

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-HL - PIM Certified		Dated: 05-02-10

SD214-HF1P2LDF

SD214-HF1P4LDF

SD214-HF2P2LDF

SD214-HF2P3LDF(D00S-LSABK)

Electrical Specifications

Frequency Range, MHz	118 to 138	118 to 138	138 to 174	138 to 174
Gain (nominal), dBd (dBi)	7 (9.1)	7.5 (9.6)	7 (9.1)	7.2 (9.3)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.4:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Bi-directional	Offset	Bi-directional	3/8 wave
Horizontal beamwidth, degrees		210		
Vertical beamwidth, degrees	18	18	18	18
Average Power Input (max), W	300	300	300	300
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-150	-140
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz				

Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Length/ Height, in (mm)	240 (6096)	240 (6096)	240 (6096)	236.2 (6000)
Width, in (mm)	43.7 (1110)	25.8 (655)	43.7 (1110)	33.6 (854)
Depth, in (mm)	5.8 (147)	5.8 (147)	5.8 (147)	4.3 (108)
Base pipe diameter, in (mm)	4 (102)	4 (102)	4 (102)	2.9 (73)
Weight, lbs (kg)	101 (45.9)	95 (43.1)	101 (45.9)	82.1 (37.3)
Weight iced, lbs (kg)	317 (143.9)	291 (132.1)	317 (143.9)	434 (197)
Actual Shipping weight, lbs (kg)	150 (68.1)	135 (61.3)	150 (68.1)	150 (68.1)
Shipping dimensions, in (mm)	247x6x44 (6274x152x1118)	247x6x44 (6274x152x1118)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)
FPE, ft² (m²)			6.29 (0.58)	
Mounting hardware	Clamps not supplied	Clamps not supplied	Clamps not supplied	Clamps not supplied

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E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
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SD214-HF2P4LDF

SD214-HF2P4LDF(D00S-LSABK)

SD214-HF3P2LDF

SD214-HF3P4LDF

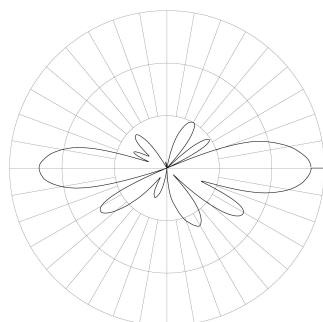
Electrical Specifications

Frequency Range, MHz	138 to 174	138 to 174	190 to 225	190 to 225
Gain (nominal), dBd (dBi)	7.5 (9.6)	7.5 (9.6)	7 (9.1)	7.5 (9.6)
Input VSWR (max)	1.5:1	1.4:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Offset	Offset	Bi-directional	Offset
Horizontal beamwidth, degrees	180	185		210
Vertical beamwidth, degrees	18	18	18	18
Average Power Input (max), W	300	300	300	300
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-150	-150
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	36			

Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Length/ Height, in (mm)	240 (6096)	236.2 (6000)	240 (6096)	240 (6096)
Width, in (mm)	25.6 (650)	24.5 (622)	43.7 (1110)	25.8 (655)
Depth, in (mm)	5.8 (147)	4.3 (108)	5.8 (147)	5.8 (147)
Base pipe diameter, in (mm)	4 (102)	2.9 (73)	4 (102)	4 (102)
Weight, lbs (kg)	93 (42.2)	78.5 (35.6)	101 (45.9)	95 (43.1)
Weight iced, lbs (kg)	291 (132.1)	413.4 (187.7)	317 (143.9)	291 (132.1)
Actual Shipping weight, lbs (kg)	135 (61.3)	135 (61.3)	150 (68.1)	135 (61.3)
Shipping dimensions, in (mm)	245x29x6.5 (6223x737x165)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)	247x44x6 (6274x1118x152)
FPE, ft² (m²)				
Mounting hardware	Clamps not supplied	Clamps not supplied	Clamps not supplied	Clamps not supplied

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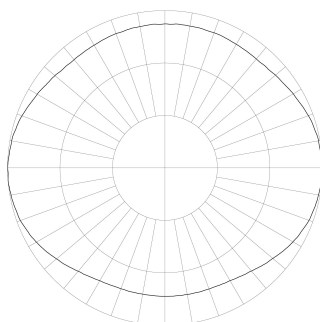


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SD214-HF1P2LDF

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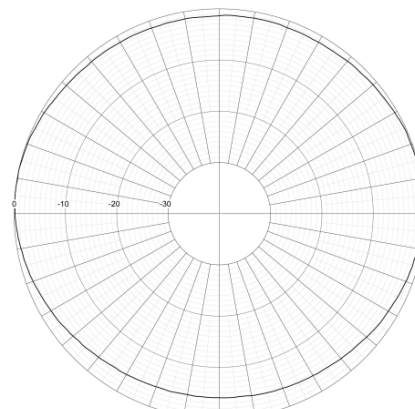


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Azimuth
Relative Gain - 10 dB per Division

SD214-HF1P2LDF

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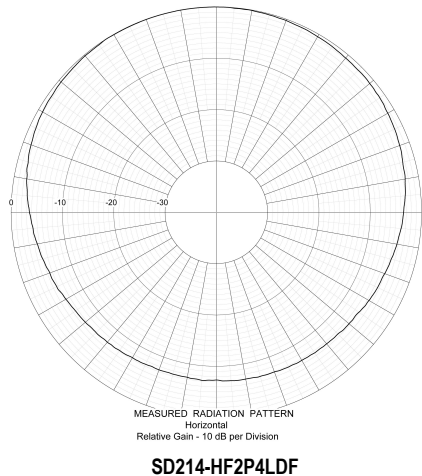


MEASURED RADIATION PATTERN
Horizontal
Relative Gain - 10 dB per Division

SD214-HF1P4LDF

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