

SD314-HL- PIM Certified 4 dipole antenna, 7.0/7.5 dBd gain, low PIM, HD, 370-512 MHz

- Industry-leading -150 dBc PIM rating, covering 370-512 MHz in 3 band splits
- 7.0 dBd gain elliptical (bi-directional) pattern (1/2 wave), 7.5 dBd in offset pattern (1/4 wave)
- Heavy duty wind rating and 300W power handling

The SD314-HL series is an 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 370 to 512 MHz in 2 sub bands, 370-460 MHz and 406-512 MHz for private mobile networks, public safety and public security networks.

The SC314-HL series is also a low intermod antenna, with a PIM rating of -150 dBc, the best in the industry.

The standard connector offered is 7/16" DIN female.

Clamps are not included but recommended is the set of #5 clamps.

Application Notes

- The SD314-L is a rugged low-PIM, higher-gain dipole antenna designed to provide broad coverage or superior building penetration in urban environments for public safety and public security applications. The SD314-L is especially well suited to multicoupled applications where PIM is a consideration.
- The SD314-L series covers 370-512 MHz in 3 band splits: 370-430 MHz (F1: for TETRA applications), 406-470 MHz (F2, for APCO P-25 applications), 450-512 MHz (F3).
- SD314-HF2P4LDF specifications are shown at the series level

Model	Description	Pattern
SD314-HF1P2LDF	7 dBd gain, elliptical, HD, 7/16 DIN (female) connector, 370-430 MHz	Bi-directional
SD314-HF1P4LDF	7.5 dBd gain, offset, HD, 7/16 DIN (female) connector, 370-430 MHz	Offset
SD314-HF2P2LDF	7 dBd gain, elliptical, HD, 7/16 DIN (female) connector, 406-470 MHz	Bi-directional
SD314-HF2P4LDF	7.0 dBd gain, offset, HD, 7/16 DIN (female) connector, 406-470 MHz	Offset
SD314-HF3P2LDF	7 dBd gain, elliptical, HD, 7/16 DIN (female) connector, 450-512 MHz	Bi-directional
SD314-HF3P4LDF	7.5 dBd gain, offset, HD, 7/16 DIN (female) connector, 450-512 MHz	Offset

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Product Specification Sheet		SD314-HL- PIM Certified		Dated: 05-02-10

SD314-HF1P2LDF

SD314-HF1P4LDF

SD314-HF2P2LDF

SD314-HF2P4LDF

Electrical Specifications

Frequency Range, MHz	370 to 430	370 to 430	406 to 470	406 to 470
Gain (nominal), dBd (dBi)	7 (9.1)	7.5 (9.6)	7 (9.1)	7 (9.1)
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	Offset
Horizontal beamwidth, degrees		200		180
Vertical beamwidth, degrees	15	16	15	16
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	60	60	64	64

Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Length/ Height, in (mm)	120.1 (3051)	120.3 (3056)	120.1 (3051)	120.1 (3051)
Width, in (mm)	18.5 (470)	11.9 (301)	18.5 (470)	11 (279)
Depth, in (mm)	3.5 (89)	3.5 (89)	3.5 (89)	3.5 (89)
Base pipe diameter, in (mm)	2.4 (60)	2.4 (60)	1.9 (48)	1.9 (48)
Base pipe mounting length, in (mm)	26 (660)	26 (660)	26 (660)	26 (660)
Weight, lbs (kg)	25.3 (11.5)	23.1 (10.5)	13.5 (6.1)	25.1 (11.4)
Weight iced, lbs (kg)	39.9 (18.1)	34.5 (15.7)	17.1 (7.8)	15.3 (6.9)
Actual Shipping weight, lbs (kg)	43 (19.5)	37 (16.8)	40 (18.2)	30 (13.6)
Shipping dimensions, in (mm)	125x22x5 (3175x559x127)	125x16x5 (3175x406x127)	118x4x20 (2997x102x508)	118x4x20 (2997x102x508)
Mounting hardware	clamps not supplied	clamps not supplied	clamps not supplied	clamps not supplied

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Product Specification Sheet		SD314-HL- PIM Certified		Dated: 05-02-10

SD314-HF3P2LDF

SD314-HF3P4LDF

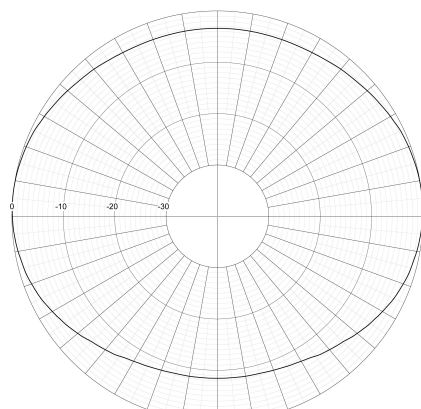
Electrical Specifications

Frequency Range, MHz	450 to 512	450 to 512
Gain (nominal), dBd (dBi)	7 (9.1)	7.5 (9.6)
Input VSWR (max)	1.5:1	1.5:1
Polarization	vertical	vertical
Pattern	Bi-directional	Offset
Horizontal beamwidth, degrees		200
Vertical beamwidth, degrees	15	16
Average Power Input (max), W	300	300
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150
Lightning protection	DC ground	DC ground
Bandwidth, MHz	62	62

Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)
Length/ Height, in (mm)	120.1 (3051)	120.1 (3051)
Width, in (mm)	16.3 (414)	11 (279)
Depth, in (mm)	3.5 (89)	3.5 (89)
Base pipe diameter, in (mm)	1.9 (48)	1.9 (48)
Base pipe mounting length, in (mm)	26 (660)	26 (660)
Weight, lbs (kg)	13.3 (6)	13 (5.9)
Weight iced, lbs (kg)	16.6 (7.5)	15.6 (7.1)
Actual Shipping weight, lbs (kg)	40 (18.2)	30 (13.6)
Shipping dimensions, in (mm)	118x4x20 (2997x102x508)	118x4x20 (2997x102x508)
Mounting hardware	clamps not supplied	clamps not supplied

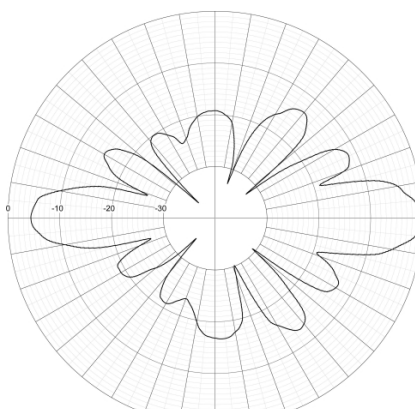
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MEASURED RADIATION PATTERN
Horizontal
Relative Gain - 10 dB per Division

SD314-HF1P2LDF

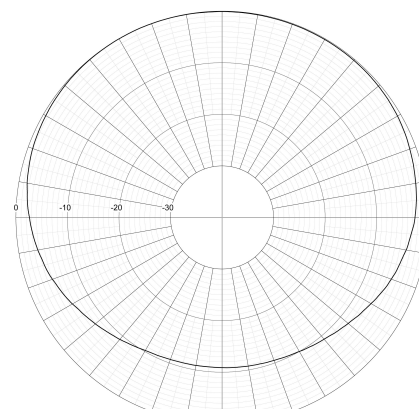
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MEASURED RADIATION PATTERN
Vertical
Relative Gain - 10 dB per Division

SD314-HF1P2LDF

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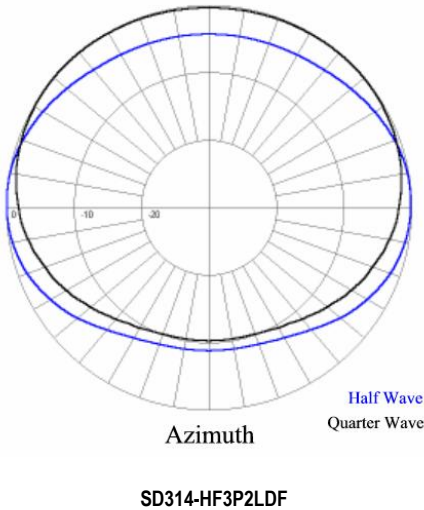
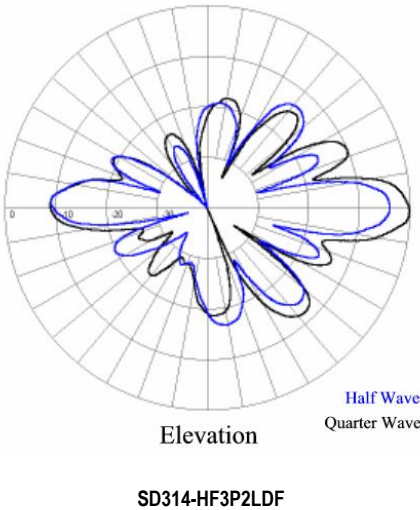
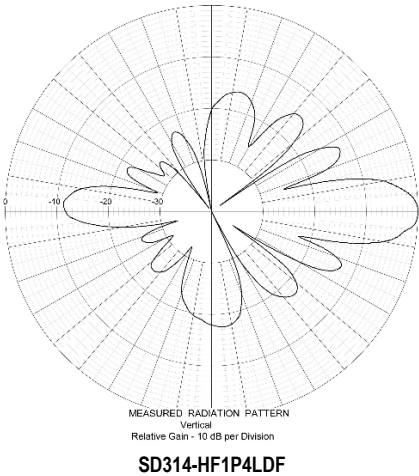


MEASURED RADIATION PATTERN
Horizontal
Relative Gain - 10 dB per Division

SD314-HF1P4LDF

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