

Antennas 700-1000 MHz Antennas SC420-HL - PIM Certified Series

SC420-HF1LDF(DXX) Collinear omni, 7.5 dBd, low PIM, HD, 806-869 MHz

Medium-gain antenna covering 806-869 MHz

Also referred as: SRL420DHDLN*1

- Light weight and compact design
- 0-6° electrical downtilt available
- · Zero degree downtilt model can be installed either inverted or upright

The SC420 omni-directional collinear antenna offers 7.5 dBd gain in an extremely rugged package. This lightweight antenna (only 12.5 lb excluding mounting clamps) is wind rated per EIA standards at 150 mph.

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

Model Number	Downtilt	CTM	Mounting configuration
SC420-HF1LDF(D00)	0°	005420	upright or inverted
SC420-HF1LDF(D01)	1°	006189	upright
SC420-HF1LDF(D02)	2°	006189	upright
SC420-HF1LDF(D03)	3°	006189	upright
SC420-HF1LDF(D04)	4°	006189	upright
SC420-HF1LDF(D05)	5°	006189	upright
SC420-HF1LDF(D06)	6°	006189	upright

Application Notes

• Recommend SMK-325-A3 or SMK-325-A7 for Offset Side Mount. Available from Sinclair separately.

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) 1487 84 28 19	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 EPR 016278		SC420-HF1LDF(DXX)	Issue: 7	Dated: 04-06-18 Dated: 04-06-18	
Customer Tech Manual 005420 or 006189		Sinclair's commitment to product leadership may result in improvement or change to this product			

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Electrical Specifications

Frequency Range	MHz	806 to 869	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	7.5 (9.6)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Pattern		Omni-directional	
Vertical beamwidth (typ)	degrees	11	
Average Input Power (max)	W	750	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
Lightning protection		DC ground	
Electrical tilt (available)		0 to 6 degrees	

in (mm)

in (mm)

in (mm)

in (mm)

in (mm)

lbs (kg)

lbs (kg)

in (mm)

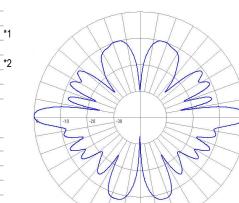
Notes

*1 : Qty 2

Ordering Information

N-Female connector also available (PIM and power may vary).

When ordering, please refer to the model list on the previous page for specific model numbers and downtilt configurations.



Environmental Specifications

Mechanical Specifications

Base pipe mounting length

Mounting Hardware (Included)

Mounting configurations

Shipping dimensions

Estimated Shipping Weight

Recommended For Offset Side Mount:

Base pipe diameter

Radome material Weight

Width

Depth

Length

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	1.1 (0.1)
Wind Loading Area (1/2" ice)	ft² (m²)	2.5 (0.23)
Rated wind velocity (no ice)	mph (km/h)	150 (242)
Rated wind velocity (1/2" radial ice)	mph (km/h)	110 (177)
Lateral Thrust (100 mph No Ice)	lbs (N)	41.6 (185)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	108.9 (147)

Vertical, 0° downtilt

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2.5 (64)

2.5 (64)

102.5 (2604)

2.5 (64)

18 (457)

fiberglass (UV protected)

15 (6.81)

Clamp130

SMK-325-A3 or SMK-325-A7

upright, inverted

41 (18.61) 143x4x4 (3632x102x102)

^{*2 :} D00 model (0°DT) can be installed upright or inverted; downtilt models upright only.