

SC420-HF3LDF(DXX) Collinear omni, 7-7.5 dBd, low PIM, HD, 890-940 MHz

Also referred as: SRL420DHDLN*3

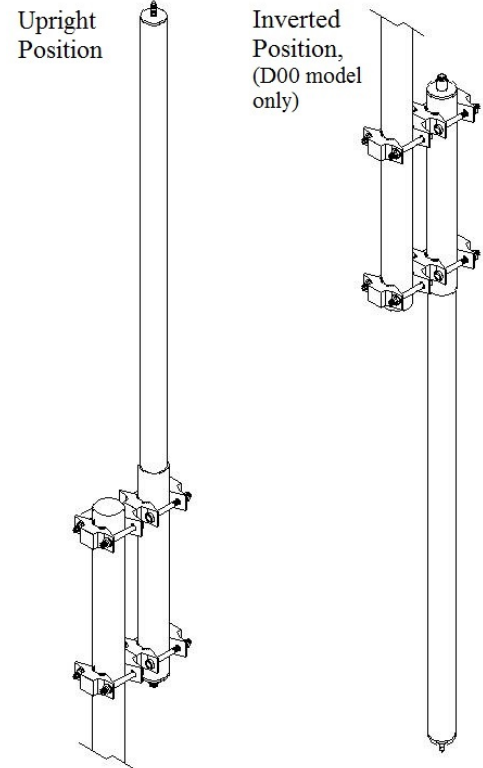
- Medium-gain antenna covering 890-940 MHz
- Light weight and compact design
- 0-6° electrical downtilt available
- Zero degree downtilt model can be installed either inverted or upright

The SC420 omni-directional collinear antenna offers 7-7.5 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. Available for standard omni coverage or with downtilt pattern, this antenna is the most economical choice for 806-960 MHz systems where relatively low gain and wider beamwidth are acceptable.

The Zero degree downtilt model can be mounted either upright or inverted, downtilt models should be mounted in an upright position only.

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	Gain
SC420-HF3LDF(D00)	0°	7.5
SC420-HF3LDF(D01)	1°	7
SC420-HF3LDF(D02)	2°	7
SC420-HF3LDF(D03)	3°	7
SC420-HF3LDF(D04)	4°	7
SC420-HF3LDF(D05)	5°	7
SC420-HF3LDF(D06)	6°	7



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

Electrical Specifications

Frequency Range	MHz	890 to 940	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	7.5 (9.6)	*1
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	

Notes

- *1 : Gain is 7 dBd for downtilt version
- *2 : Qty 2
- *3 : D00 model (0°DT) can be installed upright or inverted; downtilt models upright only.

Mechanical Specifications

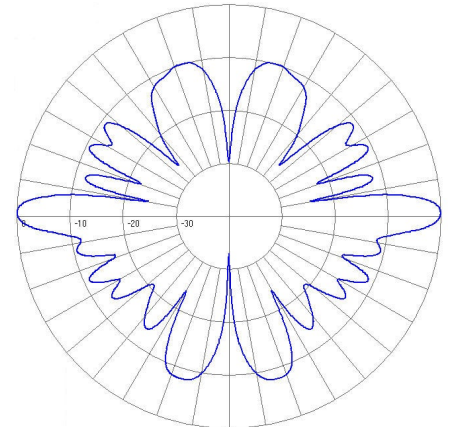
Width	in (mm)	2.5 (64)	
Depth	in (mm)	2.5 (64)	
Length	in (mm)	102.5 (2604)	
Base pipe diameter	in (mm)	2.5 (64)	
Base pipe mounting length	in (mm)	18 (457)	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	15 (6.81)	
Mounting Hardware (Included)		Clamp130	*2
Recommended For Offset Side Mount:		SMK-325-A3 or SMK-325-A7	
Mounting configurations		upright, inverted	*3
Estimated Shipping Weight	lbs (kg)	41 (18.61)	
Shipping dimensions	in (mm)	143x4x4 (3632x102x102)	

Environmental Specifications

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)

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.



Vertical, 0° downtilt

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