

SC343-HF1LDF(DXX) Aurora™ collinear omni antenna, 3 dBd, HD, low PIM, 400-420 MHz

- Medium gain, omni-directional pattern
- Patent-pending Aurora™ design for highly consistent RF performance
- Heavy duty construction and UV protected radome for harsh environment
- 0, 3, or 6 degrees of electrical downtilt available

The Aurora™ SC family is Sinclair's next-generation of public safety collinear antennas. The patent-pending design utilizes cutting-edge yet field-proven technology to deliver an unparalleled combination of highly stable RF pattern, higher gain, shorter length and wider bandwidth.

Specifically, the SC343-HL series collinear omni-directional antenna offers 3 dBd gain in 20 MHz band splits covering the 351-512 MHz UHF frequency range. This antenna is designed for a high degree of operational reliability in extreme wind, ice, and corrosive conditions. Its relatively low mass and small wind-loading profile make it easy to install. The antenna is fully DC grounded for protection against lightning and static conditions.

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
SC343-HF1LDF(D00)	0°
SC343-HF1LDF(D03)	3°
SC343-HF1LDF(D06)	6°



www.sinctech.com

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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Product Specification Sheet		SC343-HF1LDF(DXX)	Issue: 1	Dated: 06-04-22
EPR				Dated: 16-12-19
Customer Tech Manual				

### Electrical Specifications

Frequency Range	MHz	400 to 420
Bandwidth	MHz	20
Connector		7/16 DIN-Female
Gain (nominal)	dBd (dBi)	3 (5.1)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni- directional
Vertical beamwidth (typ)	degrees	28
Average Input Power (max)	W	250
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
Lightning protection		DC ground
Electrical tilt (available)		0, 3, or 6 degrees

### Notes

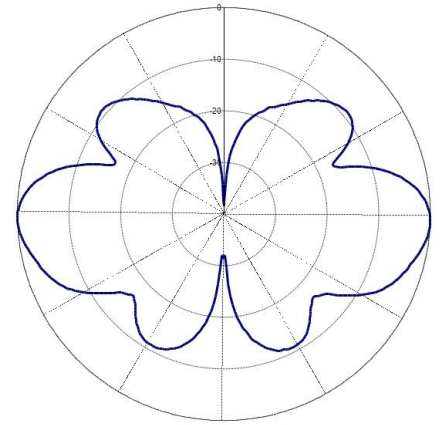
\*1 : Qty: 2

### Mechanical Specifications

Width	in (mm)	2 (51)
Depth	in (mm)	2 (51)
Length/ Height	in (mm)	49.7 (1262)
Base pipe diameter	in (mm)	2 (51)
Base pipe mounting length	in (mm)	9 (229)
Radome material		fiberglass
Weight	lbs (kg)	5 (2.27)
Weight iced (1/2" ice)	lbs (kg)	15 (6.81)
Mounting configurations		upright
Mounting Hardware (Optional)		Clamp130, or Clamp090M *1
Estimated Shipping Weight	lbs (kg)	14 (6.36)
Shipping dimensions	in (mm)	64x4.5x4.5 (1626x114x114)
Radome Colour		Blue

### Ordering Information

Clamps must be purchased separately.  
When ordering, please refer to the chart on the previous page for specific model numbers and downtilt configurations.



Vertical, 0° downtilt shown

### Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	0.4 (0.04)
Wind Loading Area (1/2" ice)	ft² (m²)	0.6 (0.06)
Rated wind velocity (no ice)	mph (km/h)	225 (362)
Rated wind velocity (1/2" radial ice)	mph (km/h)	185 (298)
Lateral Thrust (100 mph No Ice)	lbs (N)	15 (66.7)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	15 (20.3)
Tip deflection (100 mph No Ice)	degrees	0.1

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