

[< Home](#)
[< Family](#)

SC323-HL- PIM Certified Collinear omni antenna, 3 dBd gain, low PIM, 380-430 MHz

- Efficient, easy to install and durable
- Rugged 3 dBd gain, collinear omni designed for reliable operations in extreme conditions
- Low PIM with -150 dBc rating
- No ground radials

Sinclair's SC323-HL series of heavy duty, omni-directional collinear antennas provides 3 dBd gain over the specified sub-bands. The sub-bands include 335-345 MHz (F6 sub-band), 380-400 MHz (T1 sub-band), 410-430 MHz (T2 sub-band), 406-420 MHz (F1 sub-band), 450-470 MHz (F2 sub-band), and 490-512 MHz (F4 sub-band). The combination of 3 dBd gain and the availability of 3° or 6° of beamtilt results in a vertical radiation pattern that is ideal for almost all coverage requirements, both local and wide area. These antennas are internally DC grounded, aiding in lightning protection and the reduction of static noise. Drainage vents at the base allow the antenna to "breathe," and thus prevent condensation build up.

They are extremely durable, efficient and easy to install.

The HL series is an upgrade of the SC323 to achieve a low PIM rating of -150 dBc (2 carrier, 20 watts, 3rd order). It is ideal for use in multi-channel systems or congested sites.



Model	Description	Pattern
SC323-HF1LDF(D00-G3)	3 dBd gain, Ground rods free, 7/16 DIN (female) connector, 406-420 MHz	Omni-directional
SC323-HF2LDF(D00-G3)	3 dBd gain, Ground rods free, 7/16 DIN (female) connector, 450-470 MHz	Omni-directional
SC323-HT1LDF(D00-G3)	3 dBd gain, Ground rods free, 7/16 DIN (female) connector, 380-400 MHz	Omni-directional
SC323-HT2LDF(D00-G3)	3 dBd gain, Ground rods free, 7/16 DIN (female) connector, 410-430 MHz	Omni-directional

www.sinctech.com

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		SC323-HL- PIM Certified		Dated: 05-02-10

[SC323-HF1LDF\(D00-G3\)](#)

[SC323-HF2LDF\(D00-G3\)](#)

[SC323-HT1LDF\(D00-G3\)](#)

[SC323-HT2LDF\(D00-G3\)](#)

Electrical Specifications

Frequency Range, MHz	406 to 420	450 to 470	380 to 400	410 to 430
Gain (nominal), dBd (dBi)	3 (5.1)	3 (5.1)	3 (5.1)	3 (5.1)
Input VSWR (max)	1.4:1	1.4:1	1.4:1	1.4:1
Polarization	vertical	vertical	vertical	vertical
Impedance, Ω	50	50	50	50
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Vertical beamwidth, degrees	28	28	28	28
Average Power Input (max), W	500	500	500	500
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-150	-150
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	14	20	20	20
Electrical tilt (available)			0	0,6 downtilt

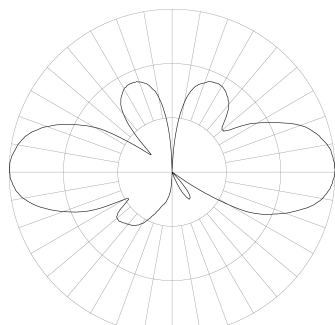
Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Length/ Height, in (mm)			76 (1930)	
Width, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Depth, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Base pipe diameter, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Base pipe mounting length, in (mm)	12 (305)	12 (305)	12 (305)	12 (305)
Weight, lbs (kg)	6.1 (2.8)	6.2 (2.8)	6 (2.7)	5.8 (2.6)
Weight iced, lbs (kg)	15.5 (7)	15 (6.8)	16 (7.3)	15.5 (7)
Shipping dimensions, in (mm)	96x3.5x3.5 (2438x89x89)	80x4x4 (2032x102x102)	102x3.5x3.5 (2591x89x89)	114x4x4 (2896x102x102)
Length, in (mm)	69.1 (1755)	67.6 (1718)		69 (1753)
Mounting hardware	#130 clamp	Clamp #130D	Clamp #130D	#130 clamp
Radome Colour	Blue	Blue	Blue	Blue

Environmental Specifications

Temperature range, °F (°C)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent), ft ² (m ²)	0.63 (0.06)	0.6 (0.06)	0.66 (0.06)	0.63 (0.06)

SINCLAIR TECHNOLOGIES

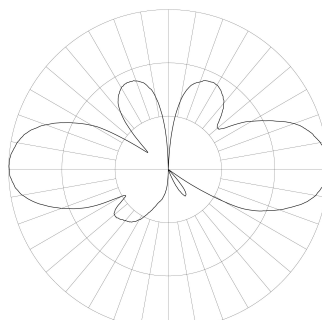


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC323-HF1LDF(D00-G3)

SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC323-HT1LDF(D00-G3)

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