

SC488-HL - PIM Certified Collinear omni antenna, 10 dBd gain, low PIM, HD, 806-960 MHz

- Suited to cellular, SMR, data and paging systems requiring omni coverage
- Combination of broad bandwidth, narrow beam width, low noise and higher gain
- Available in 4 sub-bands
- Recommend using the SMK-325-A3 side mounting kit.

Sinclair's SC488-HL series of antenna utilize a heavy-duty fiberglass radome. With 10 dBd gain and enhanced efficiency construction, the SC488-HL series will cover the frequency range of 806-960 MHz. The extremely rugged radome offers superior environmental protection and minimizes tip deflection.

Model	Description	Pattern
SC488-HF1LDF	10 dBd gain, 7/16 DIN (female) connector, 806-869 MHz	Omni-directional
SC488-HF1LDF(D02)	9.0 dBd gain, 7/16 DIN (female) connector, 806-869 MHz	Omni-directional
SC488-HF1LDF(D04)	8.5 dBd gain, 7/16 DIN (female) connector, 806-869 MHz	Omni-directional
SC488-HF2LDF	10 dBd gain, 7/16 DIN (female) connector, 824-896 MHz	Omni-directional
SC488-HF2LDF(D02)	9 dBd gain, 7/16 DIN (female) connector, 824-896 MHz	Omni-directional
SC488-HF2LDF(D06)	10 dBd gain, 7/16 DIN (female) connector, 824-894 MHz	Omni-directional
SC488-HF2LNF	10 dBd gain, N (female) connector, 824-896 MHz	Omni-directional
SC488-HF2LNF(D02)	9 dBd gain, N (female) connector, 824-894 MHz	Omni-directional



www.sinctech.com



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Product Specification Sheet		SC488-HL - PIM Certified		Dated: 05-02-10

[SC488-HF1LDF](#)

[SC488-HF1LDF\(D02\)](#)

[SC488-HF1LDF\(D04\)](#)

[SC488-HF2LDF](#)

Electrical Specifications

Frequency Range, MHz	806 to 869	806 to 869	806 to 869	824 to 896
Gain (nominal), dBd (dBi)	10 (12.1)	9 (11.1)	8.5 (10.6)	10 (12.1)
Input VSWR (max)	1.4:1	1.4:1	1.4:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Vertical beamwidth, degrees	6	6	6	6
Average Power Input (max), W	750	750	750	750
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-150	-150
Lightning protection	DC ground	DC ground	DC ground	DC ground
Electrical tilt (available)	0,2,4,6	2	4	0,2,4,6

Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Width, in (mm)	2.9 (74)	2.9 (74)	2.9 (74)	2.9 (74)
Depth, in (mm)	2.9 (73)	2.9 (73)	2.9 (73)	2.9 (73)
Base pipe diameter, in (mm)	2.9 (74)	2.9 (74)	2.9 (74)	2.9 (74)
Base pipe mounting length, in (mm)	24 (610)	24 (610)	24 (610)	24 (610)
Weight, lbs (kg)	31 (14.1)	31 (14.1)	31 (14.1)	31 (14.1)
Actual Shipping weight, lbs (kg)	65 (29.5)	65 (29.5)	65 (29.5)	65 (29.5)
Shipping dimensions, in (mm)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)
Length, in (mm)	183 (4648)	183 (4648)	183 (4648)	183 (4648)
Mounting hardware	#130 clamp	#130 clamp	#130 clamp	#130 clamp

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), ft² (m²)	2.1 (0.2)	2.1 (0.2)	2.1 (0.2)	2.1 (0.2)

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[SC488-HF2LDF\(D02\)](#)

[SC488-HF2LDF\(D06\)](#)

[SC488-HF2LNF](#)

[SC488-HF2LNF\(D02\)](#)

Electrical Specifications

Frequency Range, MHz	824 to 896	824 to 894	824 to 896	824 to 894
Gain (nominal), dBd (dBi)	9 (11.1)	10 (12.1)	10 (12.1)	9 (11.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Vertical beamwidth, degrees	6	6	6	6
Average Power Input (max), W	750	750	500	500
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-138	-138
Lightning protection	DC ground	DC ground	DC ground	DC ground
Electrical tilt (available)	2	6	0,2,4,6	2

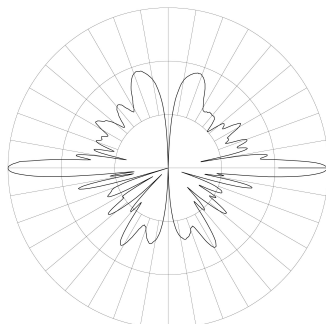
Mechanical Specifications

Connector	7/16 DIN (female)	7/16 DIN (female)	N (female)	N (female)
Width, in (mm)	2.9 (74)	2.9 (74)	2.9 (74)	2.9 (74)
Depth, in (mm)	2.9 (73)	2.9 (73)	2.9 (73)	2.9 (73)
Base pipe diameter, in (mm)	2.9 (74)	2.9 (74)	2.9 (74)	2.9 (74)
Base pipe mounting length, in (mm)	24 (610)	24 (610)	24 (610)	24 (610)
Weight, lbs (kg)	31 (14.1)	31 (14.1)	31 (14.1)	31 (14.1)
Actual Shipping weight, lbs (kg)	65 (29.5)	65 (29.5)	65 (29.5)	65 (29.5)
Shipping dimensions, in (mm)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)	223x4x4 (5664x102x102)
Length, in (mm)	183 (4648)	183 (4648)	183 (4648)	183 (4648)
Mounting hardware	#130 clamp	#130 clamp	#130 clamp	#130 clamp

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)	2.1 (0.2)	2.1 (0.2)	2.1 (0.2)	2.1 (0.2)

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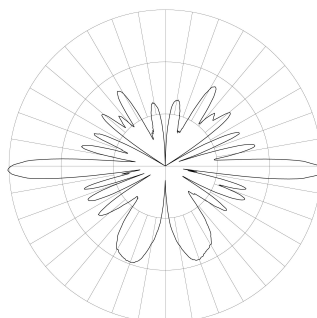


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC488-HF1LDF

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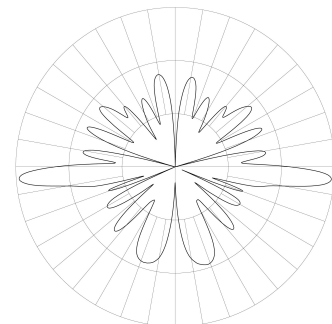


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC488-HF1LDF(D02)

SINCLAIR TECHNOLOGIES



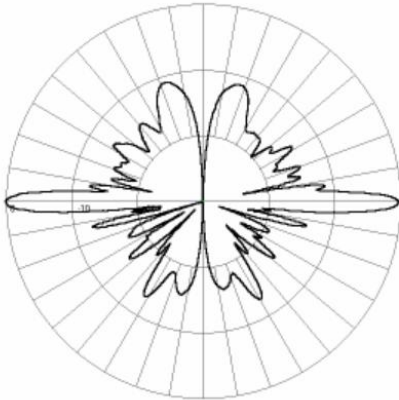
MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC488-HF1LDF(D04)

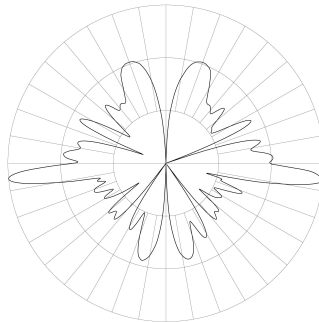
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SINCLAIR TECHNOLOGIES



Elevation

SC488-HF2LDF



MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SC488-HF2LDF(D06)

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