

SC49C-HWBLDF(DXXI-NUFP) Aurora™ omni, 11.5 dBd, HD, low PIM, null fill, PIP, inverted, 746-960 MHz

- Patent-pending Aurora™ balanced design delivers exceptional 214 MHz bandwidth
- Industry-leading -150dBc PIM rating for low noise characteristics, ideal for trunking sys.
- Heavy-duty construction with outstanding 220 mph wind rating for harsh environments
- 500W power handling; optimized null fill for close-in coverage enhancement; PIP rated

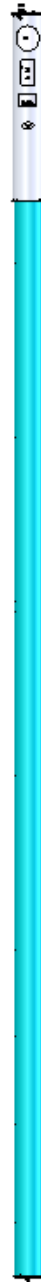
The Aurora™ SC family is Sinclair's next generation of collinear antennas. The patent-pending antenna utilizes cutting-edge, field-proven balanced design to deliver an unparalleled combination of higher gain, wider bandwidth, highly consistent RF pattern, higher wind rating and lighter weight, all in a small form factor. Designed according to IEC62305 Part 1-4, VDE0855-300, and fulfilling the requirements of lightning protection class II, these antennas are fully DC-grounded and protected with a lightning spike through the top of the radome. Unbeatable, heavy-duty construction along with the enhanced wind rating, means these antennas can last for years in the most challenging environments. The new Aurora SC series is ideal for public safety applications as it offers reliability, durability, and easy installation in a lightweight and compact package.

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

Model Number	Downtilt
SC49C-HWBLDF(D00I-NuFP)	0°
SC49C-HWBLDF(D01I-NuFP)	1°
SC49C-HWBLDF(D02I-NuFP)	2°
SC49C-HWBLDF(D03I-NuFP)	3°
SC49C-HWBLDF(D04I-NuFP)	4°
SC49C-HWBLDF(D05I-NuFP)	5°
SC49C-HWBLDF(D06I-NuFP)	6°
SC49C-HWBLDF(D07I-NuFP)	7°
SC49C-HWBLDF(D08I-NuFP)	8°
SC49C-HWBLDF(D09I-NuFP)	9°
SC49C-HWBLDF(D10I-NuFP)	10°

Application Notes

- Recommend SMK-345-A7 kit for offset side mounting. Available from Sinclair separately. Complies with EIA/TIA-329 standard.



Antenna may not appear exactly as shown.

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+1 905 727 0165 ext 232	Canada: 1 905 726 7676 International: +1 905 726 7676	+1 905 727 0165 ext 287
E-mail	salesusa@sinctech.com	salesemea@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com

Electrical Specifications

Frequency Range	MHz	746 to 960
Bandwidth	MHz	214
Connector		7/16 DIN-Female
Gain (nominal)	dBd (dBi)	11.5 (13.6)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni-directional
Vertical beamwidth (typ)	degrees	3.6
Average Input Power (max)	W	500
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
PIP(KW, max)		25 *1
Null fill	%	25
Grounding		All metal parts DC-grounded

Notes

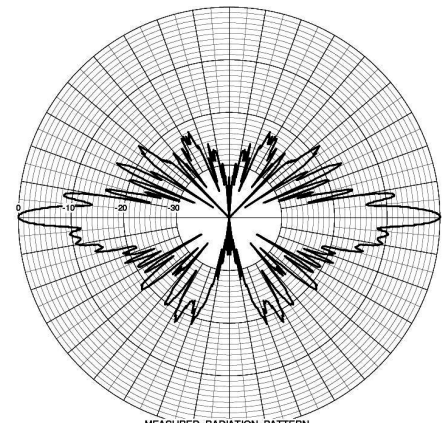
- *1 : Quantified by Motorola 12 channel combining system
- *2 : Qty:2

Mechanical Specifications

Width	in (mm)	5 (127)
Depth	in (mm)	5 (127)
Length/ Height	in (mm)	202.5 (5144)
Base pipe diameter	in (mm)	5 (127)
Base pipe mounting length	in (mm)	26 (660)
Radome material		fiberglass (UV protected)
Weight	lbs (kg)	68 (30.87)
Weight iced (1/2" ice)	lbs (kg)	121 (54.93)
Mounting Hardware (Optional)		Clamp006C *2
Mounting configurations		Inverted
Kit for Offset Side Mount (straight tower leg)		SMK-345-A7
Estimated Shipping Weight	lbs (kg)	110 (49.94)
Shipping dimensions	in (mm)	264x6.5x6.5 (6706x165x165)

Ordering Information

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



MEASURED RADIATION PATTERN
Vertical, 0° downtilt shown

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	4.4 (0.41)
Wind Loading Area (1/2" ice)	ft² (m²)	5.3 (0.49)
Rated wind velocity (no ice)	mph (km/h)	220 (354)
Rated wind velocity (1/2" radial ice)	mph (km/h)	190 (306)
Lateral Thrust (100 mph No Ice)	lbs (N)	171 (760.6)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	1062 (1433.7)
Tip deflection (100 mph No Ice)	degrees	0.9

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