

SC49C-HWBLDF(DXX) Aurora™ collinear omni, 11.5 dBd, Low PIM, HD, 746-960 MHz

- Patent-pending Aurora™ PCB design delivers exceptional 214 MHz bandwidth
- Industry leading -150 dBc PIM rating for low noise characteristics, ideal for trunking systems
- Heavy-duty construction with outstanding 220 mph wind rating for harsh environments
- Electrical downtilt, null fill, PIP rated, or inverted versions are available

The Aurora™ SC family is Sinclair's next generation of collinear antennas. The patent-pending design utilizes cutting-edge, field-proven PCB technology 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 price. Null fill, PIP rated, or inverted versions are also available. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Model Number	Downtilt	CTM#	Mounting Configuration
SC49C-HWBLDF(D00)	0°	005853	upright / inverted
SC49C-HWBLDF(D01)	1°	006135	upright
SC49C-HWBLDF(D02)	2°	006135	upright
SC49C-HWBLDF(D03)	3°	006135	upright
SC49C-HWBLDF(D04)	4°	006135	upright
SC49C-HWBLDF(D05)	5°	006135	upright
SC49C-HWBLDF(D06)	6°	006135	upright
SC49C-HWBLDF(D07)	7°	006135	upright
SC49C-HWBLDF(D08)	8°	006135	upright
SC49C-HWBLDF(D09)	9°	006135	upright
SC49C-HWBLDF(D10)	10°	006135	upright

### Application Notes

- Recommend SMK-345-A7 kit for offset side mounting. Available from Sinclair separately. Complies with EIA-3296F standard.



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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#### 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
Lightning protection		DC ground
Electrical tilt (available)		0 to 10 degrees

#### 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 *1
Recommended For Offset Side Mount:		SMK-345-A7
Mounting configurations		upright, inverted *2
Estimated Shipping Weight	lbs (kg)	110 (49.94)
Shipping dimensions	in (mm)	264x6.5x6.5 (6706x165x165)

#### 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

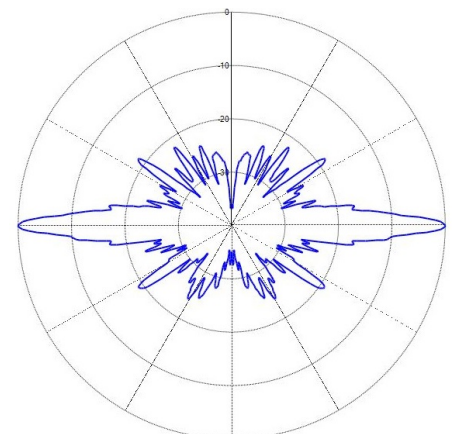
#### Notes

\*1 : Qty:2

\*2 : D00 model can be installed upright or inverted, downtilt models upright only.

#### Ordering Information

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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