



A Norsat Company in Norsat

SC499-HWBLDF(DXX-NUF)

Aurora™ collinear omni, 9 dBd, HD, Iow PIM, null fill, 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 200 mph wind rating for harsh environments
- · 500W power handling; optimized null fill for close-in coverage enhancement

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 price. PIP rated or inverted versions are also available. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Model Number	Downtilt
SC499-HWBLDF(D00-NUF)	0°
SC499-HWBLDF(D01-NUF)	1º
SC499-HWBLDF(D02-NUF)	2°
SC499-HWBLDF(D03-NUF)	3°
SC499-HWBLDF(D04-NUF)	4°
SC499-HWBLDF(D05-NUF)	5°
SC499-HWBLDF(D06-NUF)	6°
SC499-HWBLDF(D07-NUF)	7°
SC499-HWBLDF(D08-NUF)	8°
SC499-HWBLDF(D09-NUF)	9°
SC499-HWBLDF(D10-NUF)	10°

Application Notes

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

Clamp not supplied

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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Product Specificatio	n Sheet	SC499-HWBLDF(DXX-NUF)	Issue: 1	Dated: 13-01-21

FPR 018943 Customer Tech Manual 006168

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Antennas 700-1000 MHz Antennas SC499-HL PIM Certified Series

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Electrical Specifications			
Frequency Range	MHz	746 to 960	
Bandwidth	MHz	214	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	9 (11.1)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni-directional	
Vertical beamwidth (typ)	degrees	6.5	*1
Average Input Power (max)	W	500	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
Null fill	%	25	
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)	143.6 (3647)	
Base pipe diameter	in (mm)	5 (127)	
Base pipe mounting length	in (mm)	20 (508)	
Radiating element material		prntd circuit bd + Aluminum	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	51 (23.15)	
Weight iced (1/2" ice)	lbs (kg)	88 (39.95)	
Mounting Hardware (Optional)		Clamp006C	*2
Recommended For Offset Side Mount:		SMK-345-A7	*3
Mounting configurations		upright	
Estimated Shipping Weight	lbs (kg)	85 (38.59)	
Shipping dimensions	in (mm)	155x6.5x6.5 (3937x165x165)	

Environmental Specifications

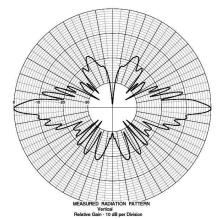
\equiv	Environmental Specifications		
<u></u>	Temperature range	°F (°C)	-40 to +140 (-40 to +60)
S	Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	3 (0.28)
Ċ.	Wind Loading Area (1/2" ice)	ft² (m²)	3.7 (0.34)
To	Survival wind velocity (no ice)	mph (km/h)	320 (515)
Œ	Survival wind velocity (1/2" radial ice)	mph (km/h)	272 (438)
7	Rated wind velocity (no ice)	mph (km/h)	200 (322)
\geq	Rated wind velocity (1/2" radial ice)	mph (km/h)	170 (274)
-=	Lateral Thrust (100 mph No Ice)	lbs (N)	118 (524.9)
S	Bending moment (100 mph No Ice)	ft-lbs (Nm)	486 (656.1)
3	Tip deflection (100 mph No Ice)	degrees	0.3
\leq			
5			

Notes

- *1: ±1 degree
- *2 : Qty 2
- *3: Must be ordered separately.

Ordering Information

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



Vertical, 0° DT

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