

Customer Tech Manual 006759





## SC34A-ST1LDF(DXX)

Aurora™ collinear omni antenna, 10 dBd, low PIM, 380-400 MHz

- Patent-pending Aurora<sup>™</sup> design for outstanding performance
- 20 MHz fully operational bandwidth with highly consistent RF performance
- · -150dBc PIM rating for low noise characteristics, ideal for wideband or trunking systems
- · Rugged design and UV protected radome for harsh environment

The Aurora™ SC family is Sinclair's next-generation of public safety collinear antennas. The patent-pending design utilizes cutting-edge yet field-proven technology to deliver an unparalleled combination of highly stable RF pattern, higher gain, and wider bandwidth.

Specifically, the SC34A series collinear omni-directional antenna offers 10 dBd gain in 20 MHz (typ) band splits covering the 380-512 MHz UHF frequency range. This antenna is designed for a high degree of operational reliability in extreme wind, ice, and corrosive conditions. Its relatively low mass and small wind-loading profile makes it easy to install. The antenna is fully DC grounded on all elements for the ultimate lightning protection and dissipation of static noise. Severe weather conditions have been fully considered in the overall design, its rugged UV resistant fiberglass radome for harsh environment, carefully designed internal supporting structure, certified long-life components, extra-long base pipe for high wind rating, etc.

When ordering, please refer to the chart below for the model number. Downtilt configurations are subject to various list price. Other connectors and pigtail terminated types are also available, please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Model Number	Gain(dBd)	Downtilt
SC34A-ST1LDF(D00)	10 ´	0°
SC34A-ST1LDF(D03)	10	3°
SC34A-ST1LDF(D06)	10	6°



Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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Product Specification Sheet EPR 019030		SC34A-ST1LDF(DXX)	Issue: 3	Dated: 04-09-20 Dated: 04-09-20



## **Antennas UHF** and Tetra Antennas SC34A-L PIM Certified Series

## A Norsat Company Norsat

Electrical Specifications			
Frequency Range	MHz	380 to 400	
Bandwidth	MHz	20	
Connector		7/16 DIN-Female	*1
Gain (nominal)	dBd (dBi)	10 (12.1)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni- directional	
Vertical beamwidth (typ)	degrees	7.5	
Average Input Power (max)	W	500	
Number of ports		1	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
Lightning protection		DC ground	
Flectrical tilt (available)		0. 3. or 6 degrees	

Notes

\*1 : Flange mount

\*2 : Qty 2

**Ordering Information** 

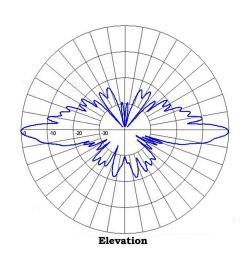
Clamps must be purchased separately.

**Mechanical Specifications** 

Mechanical Specifications			
Width	in (mm)	2.88 (73)	
Depth	in (mm)	2.88 (73)	
Length/ Height	in (mm)	260 (6604)	
Base pipe diameter	in (mm)	2.88 (73)	
Base pipe mounting length	in (mm)	18 (457)	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	36 (16.34)	
Weight iced (1/2" ice)	lbs (kg)	80 (36.32)	
Mounting Hardware (Optional)		Clamp005, or Clamp005X	*2
Recommended For Offset Side Mount:		SMK-225-A3-T5 or SMK-225-A7-T5	
Actual shipping weight	lbs (kg)	78 (35.41)	
Shipping dimensions	in (mm)	280x6x6 (7112x152x152)	

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	Environmental Specifications			
	Temperature range	°F (°C)	-40 to +140 (-40 to +60)	
	Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	2.9 (0.27)	
)	Wind Loading Area (1/2" ice)	ft² (m²)	4 (0.37)	
)	Rated wind velocity (no ice)	mph (km/h)	120 (193)	
	Rated wind velocity (1/2" radial ice)	mph (km/h)	95 (153)	
)	Lateral Thrust (100 mph No Ice)	lbs (N)	112 (498.2)	
)	Bending moment (100 mph No Ice)	ft-lbs (Nm)	1026 (1385.1)	
þ	Tip deflection (100 mph No Ice)	degrees	8.3	



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Product Specification	n Sheet	SC34A-ST1LDF(DXX)	Issue: 3	Dated: 04-09-20

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