

Antennas Low Band, Aviation, and VHF Antennas SC251-HL-PIM/PIP Certified Series

SC251-HF3LDF(D00-G3) Collinear omni antenna, 2.3 dBd gain, Iow PIM, PIP rated, HD, 148-168 MHz

- Wideband 2.3 dBd gain collinear omni antenna
- 500W power handling with low PIM and high PIP rating
- Rugged fiberglass radome provides superior environmental protection
- 0, 2, 4, or 6 degrees of electrical downtilt available

A side mounting kit is Mandatory when offset mounting the antenna. The SMK-345-A7 for Offset Side Mount is available separately.

The SC251-HL is a 2.3dBd collinear omni featuring low passive intermod performance with single or dual port configuration option available. Fabricated using durable components, this series of antennas is designed for ease of installation. The foam wrapped brass construction provides a light and durable structure housed in a UV protected fiberglass radome ensuring superior resistance to harsh environmental conditions. This family is fabricated to meet the most stringent wind and ice loading requirements.

Due to its wide band and high average power and PIP power handling capability, this antenna is ideally suited for VHF trunking applications or multi-channel operations.

The reliability and durability of this antenna makes it suitable for mission critical applications such as public safety and law enforcement.



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		SC251-HF3LDF(D00-G3)	Issue: 2	Dated: 11-10-19
Customer Tech Manual 005855		Sinclair's commitment to product leadership may result in	improvement or change to this product	



A Norsat Company n | Norsat

Antennas Low Band, Aviation, and VHF Antennas SC251-HL-PIM/PIP Certified Series

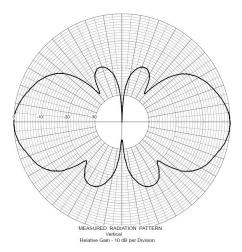
Electrical Specifications			
Frequency Range	MHz	148 to 168	
Bandwidth	MHz	20	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	2.3 (4.4)	*1
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni- directional	
Vertical beamwidth (typ)	degrees	37.5	
Average Input Power (max)	W	500	
Number of ports		1	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
PIP(KW, max)		25	
Lightning protection		DC ground	
Electrical tilt (available)		0, 2, 4, or 6 degrees	

Notes *1 : Gain=2.2-2.4dBd *2 : Qty 2

Ordering Information Clamps must be ordered separately

Mechanical Specifications

Width	in (mm)	5 (127)	
Depth	in (mm)	5 (127)	
Length/ Height	in (mm)	136 (3454)	
Base pipe diameter	in (mm)	5 (127)	
Base pipe mounting length	in (mm)	20 (508)	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	57 (25.88)	
Weight iced (1/2" ice)	lbs (kg)	92 (41.77)	
Weight iced (1" ice)	lbs (kg)	135 (61.29)	
Mounting Hardware (Optional)		Clamp006C	
Recommended For Offset Side Mount:		SMK-345-A7	
Mounting configurations		Universal mount	
Actual shipping weight	lbs (kg)	86 (39.04)	
Shipping dimensions	in (mm)	150x6x6 (3810x152x152)	
Radome Colour	. ,	Light Blue	



Environmental Specifications

Ö	Environmental Specifications
-	Temperature range
5	Wind Loading Area (Flat Plate E
Ð	Wind Loading Area (1/2" ice)
オ	Wind Loading Area (1" ice)
Ĕ	Rated wind velocity (no ice)
	Rated wind velocity (1/2" radial i
S	Rated wind velocity (1" radial ice
\geq	Lateral Thrust (100 mph No Ice)
Σ	Bending moment (100 mph No I
\leq	Tip deflection (100 mph No Ice)
	• • • • • •

OM

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)	3.5 (0.33)
Wind Loading Area (1" ice)	ft² (m²)	4.2 (0.39)
Rated wind velocity (no ice)	mph (km/h)	205 (330)
Rated wind velocity (1/2" radial ice)	mph (km/h)	175 (282)
Rated wind velocity (1/2 radial ice)	mph (km/h)	160 (258)
Lateral Thrust (100 mph No Ice)	lbs (N)	113 (502.6)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	437 (590)

degrees

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		SC251-HF3LDF(D00-G3)	Issue: 2	Dated: 11-10-19
Customer Tech Manual 005855		Sinclair's commitment to product leadership may result in	improvement or change to this product	

0.2

Sinclair's commitment to product leadership may result in improvement or change to this product Copyright © Sinclair Technologies