

SC251D-HF3LDF(DXX-G3) Collinear dual antenna, 2.3 dBd gain, low PIM, PIP rated, HD, 148-168 MHz

- Wideband 2.3 dBd gain, dual port with 35dB minimum isolation
- 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 are 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 wideband 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 make it suitable for mission-critical applications such as public safety and law enforcement.

SC251D-HL integrated two identical SC251-HL antennas into one radome to simplify the installation and save tower space.

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

Model Number	Downtilt	CTM
SC251D-HF3LDF(D00-G3)	0°	005853
SC251D-HF3LDF(D02-G3)	2°	006135
SC251D-HF3LDF(D04-G3)	4°	006135
SC251D-HF3LDF(D06-G3)	6°	006135



www.sinclaire.com

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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E-mail	salesusa@sinclaire.com	salesuk@sinclaire.com	salesla@sinclaire.com	salescan@sinclaire.com

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		2	
Isolation port to port (Min)	dB	35	
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

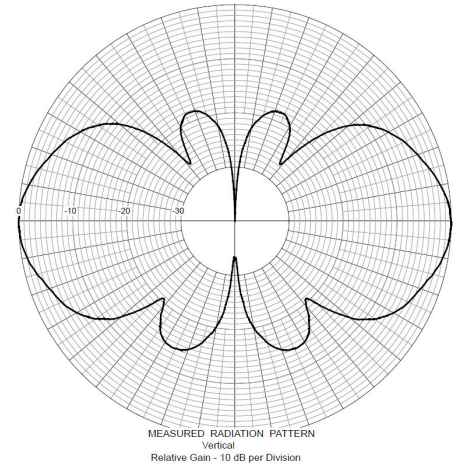
- *1 : Gain=2.2-2.4dBd
- *2 : Qty 2

Mechanical Specifications

Width	in (mm)	5 (127)	
Depth	in (mm)	5 (127)	
Length/ Height	in (mm)	280 (7112)	
Base pipe diameter	in (mm)	5 (127)	
Base pipe mounting length	in (mm)	26 (660)	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	92 (41.77)	
Weight iced (1/2" ice)	lbs (kg)	165 (74.91)	
Mounting Hardware (Optional)		Clamp006C	*2
Recommended For Offset Side Mount:		SMK-345-A7	
Mounting configurations		Universal mount	
Actual shipping weight	lbs (kg)	141 (64.01)	
Shipping dimensions	in (mm)	290x6x6 (7366x152x152)	
Radome Colour		Light Blue	

Ordering Information

Order mounting clamp 006C and side mounting kit SMK-345-A7 separately.



Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	6 (0.56)
Wind Loading Area (1/2" ice)	ft² (m²)	7.3 (0.68)
Rated wind velocity (no ice)	mph (km/h)	155 (250)
Rated wind velocity (1/2" radial ice)	mph (km/h)	135 (217)
Lateral Thrust (100 mph No Ice)	lbs (N)	243 (1080.9)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	2177 (2939)
Tip deflection (100 mph No Ice)	degrees	2.5

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