

Low Band, Aviation, and VHF Antennas SC281-HL - PIM Certified Series

SC281-HF4LNF(DXX)

Collinear omni, 5 dBd, HD, 156-174 MHz

- · Wideband 5 dBd gain omni antenna
- · Heavy duty, 500W power
- Rugged fiberglass radome provides superior environmental protection
- · 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 SC281 is a collinear omni featuring Low Passive Intermod performance with 5 dBd gain. Fabricated with 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.

With the superior PIM rating, the probability of interference caused by intermodulation is low. The wide band and high power handling capability make this antenna ideally suited for VHF trunking applications or multi-channel operation.

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	Mounting Config.
SC281-HF4LNF(D00)	0°	upright / inverted
SC281-HF4LNF(D02)	2°	upright
SC281-HF4LNF(D04)	4°	upright
SC281-HF4LNF(D06)	6°	upright
SC281-HF4LNF(D08)	8°	upright
SC281-HF4LNF(D10)	10°	upright
SC281-HF4I NF(D12)	12°	upriaht

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specification Sheet EPR 017972 Customer Tech Manual 006135 SC281-HF4LNF(DXX)

Dated: 15-07-19 Dated: 27-09-17





# Antennas Low Band, Aviation, and VHF Antennas SC281-HL - PIM Certified Series

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Electrical Specifications		
Frequency Range	MHz	156 to 174
Bandwidth	MHz	18
Connector		N-Female
Gain (nominal)	dBd (dBi)	5 (7.1)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni-directional
Vertical beamwidth (typ)	degrees	18
Average Input Power (max)	W	500
Passive intermod. (2x20W, 3rd ord.)	dBc	-138
Lightning protection		DC ground
Electrical tilt (available)		0,2,4,6,8,10, or 12 degrees

#### **Mechanical Specifications**

Mechanical opecinications			
Width	in (mm)	5 (127)	
Length	in (mm)	235.5 (5982)	
Base pipe diameter	in (mm)	5 (127)	
Base pipe mounting length	in (mm)	30 (762)	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	79 (35.87)	
Weight iced (1/2" ice)	lbs (kg)	142 (64.47)	
Mounting Hardware (Optional)		Clamp006C	*1
Recommended For Offset Side Mount:		SMK-345-A7	
Mounting configurations		upright, inverted	*2
Actual shipping weight	lbs (kg)	150 (68.1)	
Shipping dimensions	in (mm)	264x6x6 (6706x152x152)	

# **Environmental Specifications**

Environmental opcomoduono		
Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	5.3 (0.49)
Wind Loading Area (1/2" ice)	ft² (m²)	6.4 (0.59)
Rated wind velocity (no ice)	mph (km/h)	170 (274)
Rated wind velocity (1/2" radial ice)	mph (km/h)	150 (242)
Lateral Thrust (100 mph No Ice)	lbs (N)	208 (925.2)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	1610 (2173.5)
Tip deflection (100 mph No Ice)	degrees	2.2

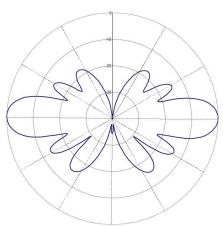
## Notes

\*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, 0º downtilt shown

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