

SC281-HF3LDF(DXX) Collinear omni, 5 dBd, low PIM, HD, 148-168 MHz

- Wideband 5 dBd gain
- 500W power handling with low PIM rating
- 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-HF3LDF(D00)	0°	upright / inverted
SC281-HF3LDF(D02)	2°	upright
SC281-HF3LDF(D04)	4°	upright
SC281-HF3LDF(D06)	6°	upright
SC281-HF3LDF(D08)	8°	upright
SC281-HF3LDF(D10)	10°	upright
SC281-HF3LDF(D12)	12°	upright



www.sinctech.com

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Electrical Specifications

Frequency Range	MHz	148 to 168
Bandwidth	MHz	20
Connector		7/16 DIN-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 Power Input (max)	W	500
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
Lightning protection		DC ground
Electrical tilt (available)		0,2,4,6,8,10, or 12 degrees

Mechanical Specifications

Width	in (mm)	5 (127)
Length	in (mm)	248.5 (6312)
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}
Actual shipping weight	lbs (kg)	128 (58.11)
Shipping dimensions	in (mm)	264x7x7 (6706x178x178)
Mounting configurations		upright, inverted ^{*2}
Recommended For Offset Side Mount:		SMK-345-A7

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft ² (m ²)	5.3 (0.49)
Wind Loading Area (1/2" ice)	ft ² (m ²)	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

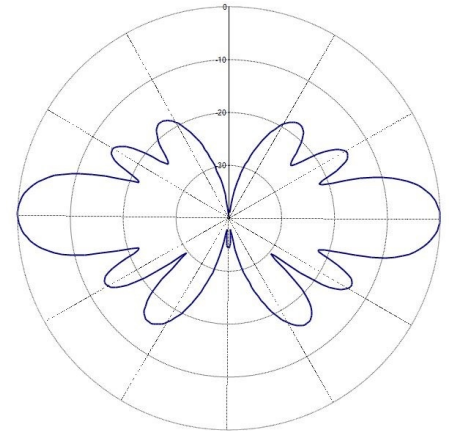
Notes

*1 : Qty 2

*2 : D00 model can be installed upright or inverted, downtilt models should be installed upright only.

Ordering Information

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



Vertical, 0° downtilt shown

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