

## SC281-HF1LNF(D00-G04) Collinear omni, 4 dBd, HD, 118-137 MHz

- Wideband 4 dBd gain
- · 500W power handling with low PIM rating
- · Rugged fiberglass radome provides superior environmental protection

The SC281 is a collinear omni featuring Low Passive Intermod performance. Fabricated with durable components, this antenna series 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 wideband and high power handling capability make this antenna ideally suited for VHF trunking applications or multi-channel operation.

Region **United States** Europe, Middle East, and Africa Canada, Caribbean, and Latin America Asia-Pacific 1 800 263 3275 +1 905 727 0165 ext 232 +1 905 727 0165 ext 287 Canada: 1 905 726 7676 Telephone International: +1 905 726 7676 E-mail salesusa@sinctech.com salesemea@sinctech.com salescan@sinctech.com salesasia@sinctech.com Product Specification Sheet SC281-HF1LNF(D00-G04) Issue: 2 Dated: 03-07-24 Dated: 03-07-24 EPR 017937 Customer Tech Manual 005853

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Antenna may not appear exactly as shown



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

Frequency Range	MHz	118 to 137	
Bandwidth	MHz	19	
Connector		N-Female	*1
Gain (nominal)	dBd (dBi)	4 (6.1)	*2
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni-directional	
Vertical beamwidth (typ)	degrees	18	*3
Average Input Power (max)	W	500	
Passive intermod. (2x20W, 3rd ord.)	dBc	-138	
Grounding		All metal parts DC-grounded	

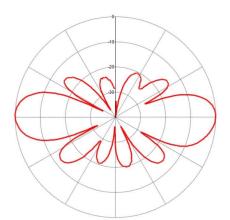
Notes 1 : Flange Type 2 : ±1 dB 3 : ±3 degrees 4 : Qty 2

#### Mechanical Specifications

Width	in (mm)	5 (127)		
Length	in (mm)	243.1 (6175)		
Base pipe diameter	in (mm)	5 (127)		
Radiating element material	adiating element material brass			
Radome material		fiberglass (UV protected)		
Weight Ibs (kg)		79 (35.87)		
Weight iced (1/2" ice)	lbs (kg) 142 (64.47)			
Mounting Hardware (Optional)		Clamp006C	*4	
Mounting configurations		upright, inverted		
Kit for Offset Side Mount (straight tower leg)		SMK-345-A7		
Actual shipping weight Ibs (kg)		150 (68.1)		
Shipping dimensions in (mm)		264x7x7 (6706x178x178)		

### **Environmental Specifications**

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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)
Survival wind velocity (no ice)	mph (km/h)	238 (383)
Survival wind velocity (1/2" radial ice)	mph (km/h)	210 (338)
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
	-	



## Vertical - 0° downtilt

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Product Specificatio EPR 017937		SC281-HF1LNF(D00-G04)	Issue: 2	Dated: 03-07-24 Dated: 03-07-24
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