

## 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.

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Electrical Specifications				Notes
Frequency Range	MHz	118 to 137		*1 : Flange Type
Bandwidth	MHz	19		*2 : ±1 dB
Connector		N-Female	*1	*3 : ±3 degrees
Gain (nominal)	dBd (dBi)	4 (6.1)	*2	*4 : Qty 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		
Lightning protection		DC ground		

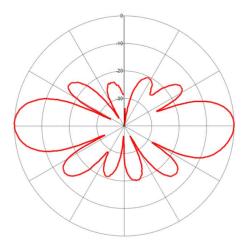
## **Mechanical Specifications**

Width	in (mm)	5 (127)	
Length	in (mm)	243.1 (6175)	
Base pipe diameter	in (mm)	5 (127)	
Radiating element material	brass		
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	*4
Mounting configurations		upright, inverted	
Kit for Offset Side Mount (straight tower leg)		SMK-345-A7	
Actual shipping weight	lbs (kg)	150 (68.1)	
Shipping dimensions	in (mm)	264x7x7 (6706x178x178)	

## **Environmental Specifications**

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





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 Canada: 1 905 726 7676 +1 9 International: +1 905 726 7676		+1 905 727 0165 ext 287
E-mail	salesusa@sinctech.com	salesemea@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com
Product Specificatio EPR 017937		SC281-HF1LNF(D00-G04)	Issue: 1	Dated: 15-03-23 Dated: 22-04-21
Customer Tech Manual 006135		Sinclair's commitment to product leadership may result in improvement or change to this product		

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