

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

Sinclair's commitment to product leadership may result in improvement or change to this product Copyright © Sinclair Technologies

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 | |

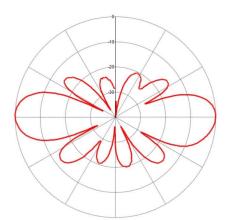
Notes 1 : Flange Type 2 : ±1 dB 3 : ±3 degrees 4 : Qty 2

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

| Entri onnional opocinicatione | | |
|---|-------------|--------------------------|
| 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

| Region | United States | Europe, Middle East, and Africa | Canada, Caribbean, and Latin America | Asia-Pacific |
|------------------------------------|-----------------------|---|--|------------------------------------|
| Telephone | 1 800 263 3275 | +1 905 727 0165 ext 232 | Canada: 1 905 726 7676 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: 2 | Dated: 03-07-24 Dated: 03-07-24 |
| Customer Tech Manual 005853 | | Sinclair's commitment to product leadership may result in improvement or change to this product | | |

Sinclair's commitment to product leadership may result in improvement or change to this product Copyright © Sinclair Technologies