

SC281-HF2LDF(DXX) Collinear omni, 5 dBd, low PIM, HD, 138-158 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-HF2LDF(D00) | 0°       | upright / inverted |
| SC281-HF2LDF(D02) | 2°       | upright            |
| SC281-HF2LDF(D04) | 4°       | upright            |
| SC281-HF2LDF(D06) | 6°       | upright            |
| SC281-HF2LDF(D08) | 8°       | upright            |
| SC281-HF2LDF(D10) | 10°      | upright            |
| SC281-HF2LDF(D12) | 12°      | upright            |



| Region           | United States         | Europe, Middle East and Africa       | Caribbean and Latin America    | Canada and rest of the world                             |
|------------------|-----------------------|--------------------------------------|--------------------------------|--|
| <b>Telephone</b> | USA: 1 800 263 3275   | International: +44 (0) 1487 84 28 19 | International: +1 905 726 7676 | Canada: 1 800 263 3275<br>International: +1 905 727 0165 |
| <b>E-mail</b>    | salesusa@sinctech.com | salesuk@sinctech.com                 | salesla@sinctech.com           | salescan@sinctech.com                                    |

#### Electrical Specifications

|                                     |           |                             |
|-------------------------------------|-----------|-----------------------------|
| Frequency Range                     | MHz       | 138 to 158                  |
| 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 <sup>*1</sup>              |
| Actual shipping weight             | lbs (kg) | 150 (68.1)                           |
| Shipping dimensions                | in (mm)  | 264x7x7 (6706x178x178) <sup>*2</sup> |
| Mounting configurations            |          | upright, inverted                    |
| 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) | 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                      |

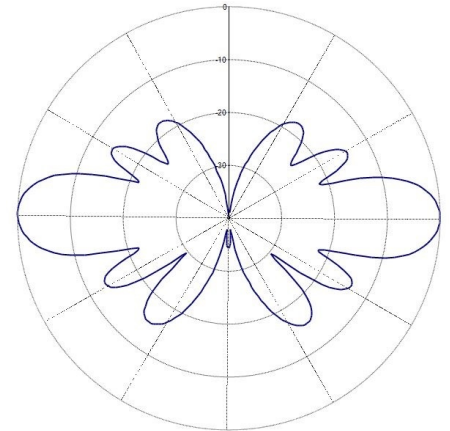
#### Notes

\*1 : Qty 2

\*2 : D00 model (0° DT) 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, 0° downtilt shown

| Region    | United States         | Europe, Middle East and Africa       | Caribbean and Latin America    | Canada and rest of the world                             |
|-----------|-----------------------|--------------------------------------|--------------------------------|--|
| Telephone | USA: 1 800 263 3275   | International: +44 (0) 1487 84 28 19 | International: +1 905 726 7676 | Canada: 1 800 263 3275<br>International: +1 905 727 0165 |
| E-mail    | salesusa@sinctech.com | salesuk@sinctech.com                 | salesla@sinctech.com           | salescan@sinctech.com                                    |