

SC346-HF1LDF(DXX) Aurora™ Collinear omni, 6 dBd, Heavy duty, low PIM, 400-420 MHz

- Patent-pending Aurora™ design for outstanding performance
- 20 MHz fully operational bandwidth with highly consistent RF performance
- -150dBc PIM rating for low noise characteristics, ideal for wideband or trunking systems
- Rugged design and UV protected radome for harsh environment

The Aurora™ SC family is Sinclair's next-generation of public safety collinear antennas. The patent-pending design utilizes cutting-edge yet field-proven technology to deliver an unparalleled combination of highly stable RF pattern, higher gain, and wider bandwidth.

Specifically, the SC346-HL series collinear omni-directional antenna offers 6 dBd gain in 20 MHz band splits covering the 380-512 MHz UHF frequency range. This antenna is designed for a high degree of operational reliability in extreme wind, ice, and corrosive conditions. Its relatively low mass and small wind-loading profile makes it easy to install. The antenna is fully DC grounded for protection against lightning and static conditions.

When ordering, please refer to the chart below for the model number. Downtilt configurations are subject to various list price. Other connectors and pigtail terminated types are also available, please contact your Sinclair Sales Representative or Customer Service Representative for more information.

| Model Number | Downtilt |
|-------------------|----------|
| SC346-HF1LDF(D00) | 0° |
| SC346-HF1LDF(D03) | 3° |
| SC346-HF1LDF(D06) | 6° |



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| Region | United States | Europe, Middle East, and Africa | Canada, Caribbean, and Latin America | Asia-Pacific |
|-----------------------------|-----------------------|---------------------------------|--|------------------------|
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| Product Specification Sheet | | SC346-HF1LDF(DXX) | Issue: 1 | Dated: 01-09-20 |

Electrical Specifications

| | | | |
|-------------------------------------|-----------|-------------------|----|
| Frequency Range | MHz | 400 to 420 | |
| Bandwidth | MHz | 20 | |
| Connector | | 7/16 DIN-Female | *1 |
| Gain (nominal) | dBd (dBi) | 6 (8.1) | |
| Input VSWR (max) | | 1.5:1 | |
| Polarization | | vertical | |
| Impedance | Ω | 50 | |
| Pattern | | Omni- directional | |
| Vertical beamwidth (typ) | degrees | 12 | |
| Average Input Power (max) | W | 500 | |
| Passive intermod. (2x20W, 3rd ord.) | dBc | -150 | |
| Lightning protection | | DC ground | |
| Electrical tilt (available) | | 0,3 or 6 degrees | |

Notes

- *1 : Flange mount
- *2 : Qty 2

Mechanical Specifications

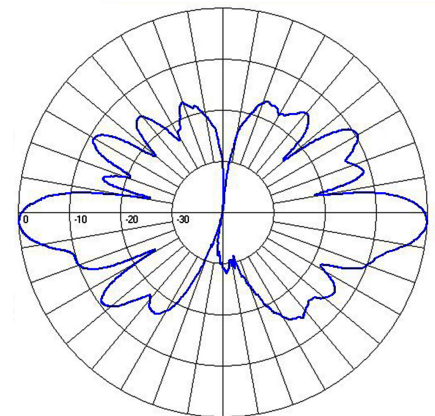
| | | | |
|------------------------------|----------|----------------------------|----|
| Width | in (mm) | 2 (51) | |
| Depth | in (mm) | 2 (51) | |
| Length | in (mm) | 136 (3454) | |
| Base pipe diameter | in (mm) | 2 (51) | |
| Radome material | | fiberglass (UV protected) | |
| Weight | lbs (kg) | 9.4 (4.27) | |
| Weight iced (1/2" ice) | lbs (kg) | 26 (11.8) | |
| Mounting Hardware (Optional) | | Clamp130, or Clamp090M | *2 |
| Mounting configurations | | upright | |
| Actual shipping weight | lbs (kg) | 30 (13.62) | |
| Shipping dimensions | in (mm) | 154x4.5x4.5 (3912x114x114) | |
| Radome Colour | | Blue | |

Ordering Information

Clamps must be purchased separately.
When ordering, please refer to the chart on the previous page for specific model numbers and downtilt configurations.

Environmental Specifications

| | | |
|---|-------------|--------------------------|
| Temperature range | °F (°C) | -40 to +140 (-40 to +60) |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²) | 1.15 (0.11) |
| Wind Loading Area (1/2" ice) | ft² (m²) | 1.79 (0.17) |
| Rated wind velocity (no ice) | mph (km/h) | 170 (274) |
| Rated wind velocity (1/2" radial ice) | mph (km/h) | 130 (209) |
| Lateral Thrust (100 mph No Ice) | lbs (N) | 40 (177.9) |
| Bending moment (100 mph No Ice) | ft-lbs (Nm) | 173 (233.6) |
| Tip deflection (100 mph No Ice) | degrees | 3.5 |



Elevation

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