

SC34A-SF2(YYY)(DXX) Aurora™ collinear omni antenna, 10 dBd, low PIM, 430-450 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 SC34A series collinear omni-directional antenna offers 10 dBd gain in 20 MHz (typ) 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 on all elements for the ultimate lightning protection and dissipation of static noise. Severe weather conditions have been fully considered in the overall design, its rugged UV resistant fiberglass radome for harsh environment, carefully designed internal supporting structure, certified long-life components, extra-long base pipe for high wind rating, etc.

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 | Gain (dBd) | Downtilt | Connector | PIM (dBc) |
|-------------------|------------|----------|-----------|-----------|
| SC34A-SF2LDF(D00) | 10 | 0° | DIN(f) | < -150 |
| SC34A-SF2LDF(D03) | 10 | 3° | DIN(f) | < -150 |
| SC34A-SF2LDF(D06) | 10 | 6° | DIN(f) | < -150 |
| SC34A-SF2SNF(D00) | 10 | 0° | N(f) | - |
| SC34A-SF2SNF(D03) | 10 | 3° | N(f) | - |
| SC34A-SF2SNF(D06) | 10 | 6° | N(f) | - |
| SC34A-SF2SNM(D00) | 10 | 0° | N(m) | - |
| SC34A-SF2SNM(D03) | 10 | 3° | N(m) | - |
| SC34A-SF2SNM(D06) | 10 | 6° | N(m) | - |



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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 | | SC34A-SF2(YYY)(DXX) | Issue: 1 | Dated: 04-09-20 |

Electrical Specifications

| | | | |
|---------------------------|-----------|------------------------|----|
| Frequency Range | MHz | 430 to 450 | |
| Bandwidth | MHz | 20 | |
| Connector | | Various options avail. | *1 |
| Gain (nominal) | dBd (dBi) | 10 (12.1) | |
| Input VSWR (max) | | 1.5:1 | |
| Polarization | | vertical | |
| Impedance | Ω | 50 | |
| Pattern | | Omni-directional | |
| Vertical beamwidth (typ) | degrees | 7.5 | |
| Average Input Power (max) | W | 500 | |
| Lightning protection | | DC ground | |

Notes

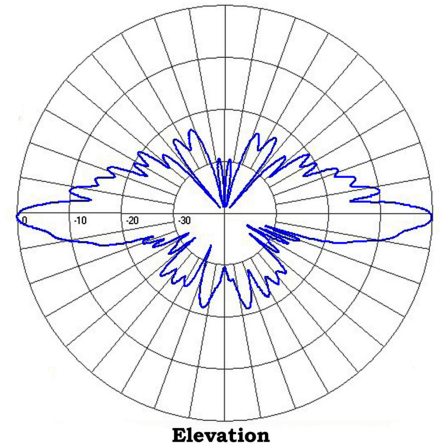
- *1 : Flange mount
- *2 : Qty:2

Mechanical Specifications

| | | | |
|------------------------------------|----------|--------------------------------|----|
| Width | in (mm) | 2.88 (73) | |
| Depth | in (mm) | 2.88 (73) | |
| Length/ Height | in (mm) | 237 (6020) | |
| Base pipe diameter | in (mm) | 2.88 (73) | |
| Base pipe mounting length | in (mm) | 18 (457) | |
| Weight | lbs (kg) | 40 (18.16) | |
| Weight iced (1/2" ice) | lbs (kg) | 74 (33.6) | |
| Mounting Hardware (Optional) | | Clamp005, or Clamp005X | *2 |
| Recommended For Offset Side Mount: | | SMK-225-A3-T5 or SMK-225-A7-T5 | |
| Actual shipping weight | lbs (kg) | 72 (32.69) | |
| Shipping dimensions | in (mm) | 248x4.5x4.5 (6299x114x114) | |

Ordering Information

Clamps must be purchased separately.



Environmental Specifications

| | | |
|---|-------------|--------------------------|
| Temperature range | °F (°C) | -40 to +140 (-40 to +60) |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²) | 2.7 (0.25) |
| Wind Loading Area (1/2" ice) | ft² (m²) | 3.7 (0.34) |
| Rated wind velocity (no ice) | mph (km/h) | 140 (225) |
| Rated wind velocity (1/2" radial ice) | mph (km/h) | 115 (185) |
| Lateral Thrust (100 mph No Ice) | lbs (N) | 101 (449.2) |
| Bending moment (100 mph No Ice) | ft-lbs (Nm) | 810 (1093.5) |
| Tip deflection (100 mph No Ice) | degrees | 5.8 |

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