

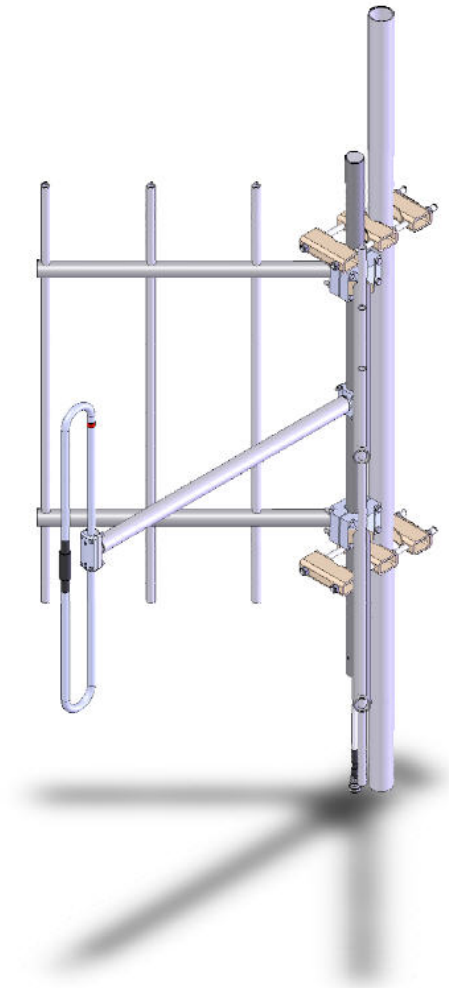
**SD210R-SF2P120LDF(S)** Low PIM VHF reflector, 120° beamwidth, 210-230MHz

- 120 degrees horizontal beamwidth for VHF simulcast applications
- Single bay dipole with 4.5 dBd of gain
- Broadband operation, covering 210-230 MHz full band
- Unique design for low passive intermodulation (PIM)

The SD210R-L series antenna is a rugged exposed dipole antenna with corner reflector which covers the entire 210-230 MHz range. Because of its broadband operation, it is an excellent antenna for multicoupling several systems or for use with widely spaced duplex frequencies. 60, 90 or 120 degrees horizontal beamwidth available for different sectorized coverages.

One, two or four bay stacked dipoles are available for different gains. The reflectors are two separate flat screens which can be disassembled for shipping and assembled on site conveniently.

This antenna is to be side mounted only. Please order the antenna with proper beamwidth and gain for your system using model numbers given in the following application notes.



Antenna may not appear exactly as shown

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| Region           | United States         | Europe, Middle East, and Africa | Canada, Caribbean, and Latin America                     | Asia-Pacific            |
|------------------|-----------------------|---------------------------------|--|-------------------------|
| <b>Telephone</b> | 1 800 263 3275        | +1 905 727 0165 ext 232         | Canada: 1 905 726 7676<br>International: +1 905 726 7676 | +1 905 727 0165 ext 287 |
| <b>E-mail</b>    | salesusa@sinctech.com | salesemea@sinctech.com          | salescan@sinctech.com                                    | salesasia@sinctech.com  |

#### Electrical Specifications

|                                     |           |                             |
|-------------------------------------|-----------|-----------------------------|
| Frequency Range                     | MHz       | 210 to 230                  |
| Bandwidth                           | MHz       | 20                          |
| Connector                           |           | 7/16 DIN-Female             |
| Gain (nominal)                      | dBd (dBi) | 4.5 (6.6)                   |
| VSWR (max)                          |           | 1.5:1                       |
| Polarization                        |           | vertical                    |
| Impedance                           | Ω         | 50                          |
| Pattern                             |           | Directional                 |
| Horizontal beamwidth (typ)          | degrees   | 120                         |
| Vertical beamwidth (typ)            | degrees   | 72                          |
| Average Input Power (max)           | W         | 300                         |
| Passive intermod. (2x20W, 3rd ord.) | dBc       | -150                        |
| Front-to-back ratio (typ)           | dB        | 17                          |
| Grounding                           |           | All metal parts DC-grounded |

#### Notes

\*1 : Qty 2 Required.

#### Ordering Information

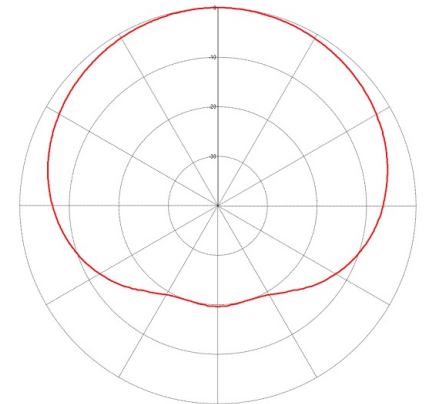
Please contact Sinclair CSR to order mounting clamps.

#### Mechanical Specifications

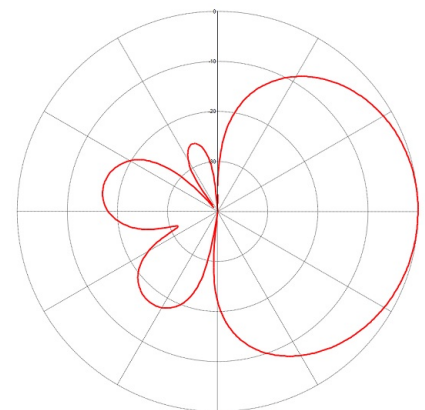
|                              |         |                          |
|------------------------------|---------|--------------------------|
| Width                        | in (mm) | 32 (813)                 |
| Depth                        | in (mm) | 17 (432)                 |
| Length/ Height               | in (mm) | 42.5 (1080)              |
| Base pipe diameter           | in (mm) | 1.9 (48)                 |
| Mounting Hardware (Optional) |         | Clamp006A or Clamp130 *1 |
| Mounting configurations      |         | side mount               |

#### Environmental Specifications

|   |             |                          |
|---|-------------|--------------------------|
| Temperature range                         | °F (°C)     | -40 to +140 (-40 to +60) |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²)    | 3 (0.28)                 |
| Wind Loading Area (1/2" ice)              | ft² (m²)    | 5.6 (0.52)               |
| Rated wind velocity (no ice)              | mph (km/h)  | 195 (314)                |
| Rated wind velocity (1/2" radial ice)     | mph (km/h)  | 145 (233)                |
| Lateral Thrust (100 mph No Ice)           | lbs (N)     | 110 (489.3)              |
| Torsional moment (100 mph No Ice)         | ft-lbs (Nm) | 85 (114.8)               |



Horizontal



Vertical

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