

**SD222-SF3PASNM** Exposed dipole, 3 dBd omni/ 6 dBd offset, field adjustable, N-Male, 142-152 MHz

Also referred as: SRL222NM\*3

- External harness allows field adjustment for omni-directional or offset coverage
- 3 dBd in omni-directional configuration, 6 dBd in offset configuration
- 10 MHz bandwidth, covering 142-152 MHz

**Recommend SMK-125-A3 or SMK-125-A7 when side mounting. Available from Sinclair separately.**

The SD222 is a broadband gain antenna that is field adjustable to provide an omni-directional or offset coverage pattern.

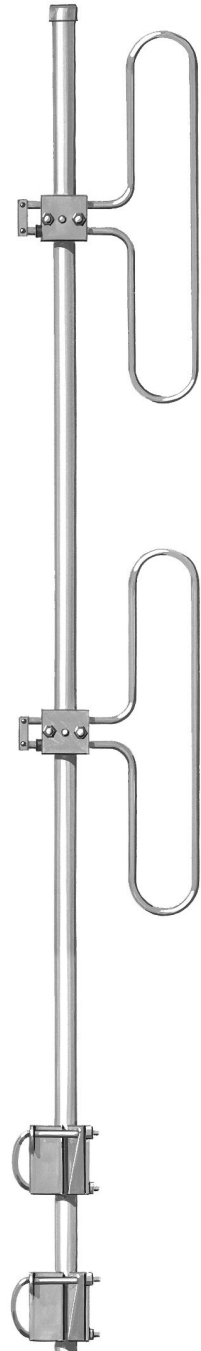
Because external cabling is used, the antenna pattern is easily changed in the field. Field adjustment guidelines are provided.

The SD222 provides 6dBd gain in the offset configuration, and 3dBd gain in the omni-directional configuration.

This antenna covers the 132-174MHz band in 7 band splits. Each band split covers 10MHz.

### Application Notes

- The field adjustable SD222 series is designed for use where either an omni-directional pattern or a higher gain offset pattern may be required.
- The SD222 series covers 132-174 MHz in 11 band splits: 132-142 MHz (F1), 137-147 MHz (F2), 142-152 MHz (F3), 147-157 MHz (F4), 152-162 MHz (F5), 158-168 MHz (F6), 163-174 MHz (F7), 150-160 MHz (F8), 160-170 MHz (F9), 215-225 MHz (F10), 139-149 MHz (F11).



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

#### Electrical Specifications

|                            |         |                            |    |
|----------------------------|---------|----------------------------|----|
| Frequency Range            | MHz     | 142 to 152                 |    |
| Bandwidth                  | MHz     | 10                         |    |
| Connector                  |         | N-Male                     |    |
| Input VSWR (max)           |         | 1.5:1                      |    |
| Polarization               |         | vertical                   |    |
| Impedance                  | Ω       | 50                         |    |
| Pattern                    |         | Omni or Offset, Adjustable |    |
| Horizontal beamwidth (typ) | degrees | 0                          | *1 |
| Vertical beamwidth (typ)   | degrees | 34                         |    |
| Average Input Power (max)  | W       | 300                        |    |
| Lightning protection       |         | DC ground                  |    |

#### Notes

- \*1 : 170 degrees when in Offset configuration.
- \*2 : Qty 2 included
- \*3 : For Omni pattern, bottom mount. For offset, side mount.

#### Mechanical Specifications

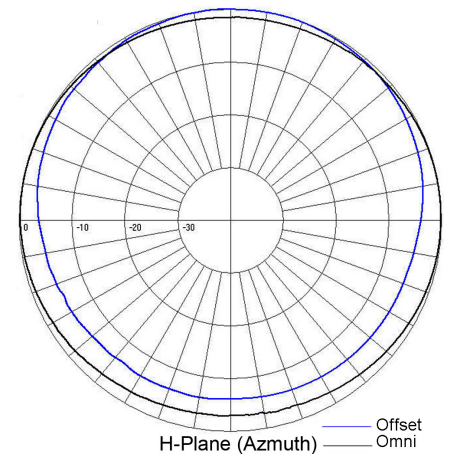
|                                    |          |                           |    |
|------------------------------------|----------|---------------------------|----|
| Width                              | in (mm)  | 12 (305)                  |    |
| Length/ Height                     | in (mm)  | 114 (2896)                |    |
| Base pipe diameter                 | in (mm)  | 1.5 (38)                  |    |
| Base pipe mounting length          | in (mm)  | 15 (381)                  |    |
| Radiating element material         |          | aluminum                  |    |
| Base pipe material                 |          | aluminum                  |    |
| Weight                             | lbs (kg) | 17 (7.72)                 |    |
| Mounting Hardware (Included)       |          | Clamp120                  | *2 |
| Recommended For Offset Side Mount: |          | SMK-125-A3 or SMK-125-A7  |    |
| Mounting configurations            |          | Universal Mount           | *3 |
| Actual shipping weight             | lbs (kg) | 25 (11.35)                |    |
| Shipping dimensions                | in (mm)  | 117x4x13.5 (2972x102x343) |    |

#### Ordering Information

Mounting hardware included.

#### Environmental Specifications

|   |             |                          |
|---|-------------|--------------------------|
| Temperature range                         | °F (°C)     | -40 to +140 (-40 to +60) |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²)    | 1.13 (0.1)               |
| Wind Loading Area (1/2" ice)              | ft² (m²)    | 2.45 (0.23)              |
| Rated wind velocity (no ice)              | mph (km/h)  | 120 (193)                |
| Rated wind velocity (1/2" radial ice)     | mph (km/h)  | 80 (129)                 |
| Lateral Thrust (100 mph No Ice)           | lbs (N)     | 65.1 (289.6)             |
| Bending moment (100 mph No Ice)           | ft-lbs (Nm) | 12.8 (17.3)              |



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