

**SD224-SF6PASNM** Exposed dipole, 6 dBd omni/ 9 dBd offset, field adjustable, N-Male, 158-168 MHz

Also referred as: SRL224NM\*6

- 6 dBd in omni-directional configuration, 9 dBd in offset configuration
- 10 MHz bandwidth, covering 158-168 MHz
- Easy to install light structural design
- For Omni pattern bottom mount; For Offset pattern side mount

**Recommend SMK-125-A3 or SMK-125-A7 for Offset Side Mount.  
Available from Sinclair separately.**

The SD224 is a 4-dipole broadband gain antenna that is field adjustable to provide an omnidirectional or offset coverage pattern.

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

The SD224 provides 9dBd gain in the offset configuration, and 6dBd gain in the omni-directional configuration.

The SD224 series covers the 128-174MHz band in 8 band splits. This model (F6) covers 158-168MHz.

**Application Notes**

- The field adjustable SD224 series is designed for use where either an omni-directional pattern or a higher gain offset pattern may be required.



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| Region           | United States         | Europe, Middle East and Africa       | Caribbean and Latin America    | Canada and rest of the world                             |
|------------------|-----------------------|--------------------------------------|--------------------------------|--|
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#### Electrical Specifications

|                            |         |                            |    |
|----------------------------|---------|----------------------------|----|
| Frequency Range            | MHz     | 158 to 168                 |    |
| 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 | 16                         |    |
| Average Power Input (max)  | W       | 300                        |    |
| Lightning protection       |         | DC ground                  |    |

#### Notes

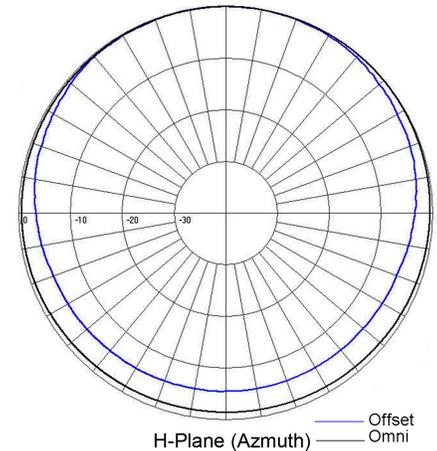
- \*1 : 170 degrees when in Offset Configuration
- \*2 : Qty 2 included
- \*3 : For Omni pattern, bottom mount. For offset, side mount.
- \*4 : 0.5" radial ice

#### Mechanical Specifications

|                                    |          |                          |    |
|------------------------------------|----------|--------------------------|----|
| Depth                              | in (mm)  | 4 (102)                  |    |
| Length/ Height                     | in (mm)  | 216 (5486)               |    |
| Width                              | in (mm)  | 14 (356)                 |    |
| Base pipe diameter                 | in (mm)  | 1.9 (48)                 |    |
| Base pipe mounting length          | in (mm)  | 36 (914)                 |    |
| Radiating element material         |          | aluminum                 |    |
| Base pipe material                 |          | aluminum                 |    |
| Weight                             | lbs (kg) | 35 (15.89)               |    |
| Mounting Hardware (Standard)       |          | Clamp130                 | *2 |
| Actual Shipping weight             | lbs (kg) | 55 (24.97)               |    |
| Shipping dimensions                | in (mm)  | 120x24x6 (3048x610x152)  |    |
| Mounting configurations            |          | Universal Mount          | *3 |
| Recommended For Offset Side Mount: |          | SMK-125-A3 or SMK-125-A7 |    |

#### Environmental Specifications

|   |             |                          |    |
|---|-------------|--------------------------|----|
| Temperature range                         | °F (°C)     | -40 to +140 (-40 to +60) |    |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²)    | 3.2 (0.3)                |    |
| Wind Loading Area (1/2" ice)              | ft² (m²)    | 6.6 (0.61)               | *4 |
| Rated wind velocity (no ice)              | mph (km/h)  | 105 (169)                |    |
| Rated wind velocity (1/2" radial ice)     | mph (km/h)  | 80 (129)                 |    |
| Lateral thrust (100 mph No Ice)           | lbs (N)     | 116 (516)                |    |
| Bending moment (100 mph No Ice)           | ft-lbs (Nm) | 539 (727.7)              |    |



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