SD310-HF2P2LDF

Also referred as: SD310-HF2P2LDF(D00)

1 dipole 1.5 dBd , bi-directional, low PIM, HD, 406-470 MHz

- Covers $406-470 \mathrm{MHz}$ band
- 1.5 dBd with bi-directional pattern
- Heavy duty wind ratings, low PIM, 75W power handling
- Antenna can be bottom or side mounted.


## Recommend SMK-125-A3 for Offset Side Mount. Available from Sinclair separately.

The SD310-L series is an extremely rugged single-bay exposed dipole antenna designed for applications where Passive Intermodulation interference (PIM) is a consideration. These premium-quality antennas are well suited to public safety/public security applications in either the TETRA or APCO P-25 bands.

The SD310-L provides industry leading -150dBc Passive Intermodulation (PIM) performance, the result of a redesign of the SD310 platform to remove possible PIM sources from the antenna. Low-PIM design features include welded dipoles, lowPIM harness cables, power dividers and radiating elements, and a low-PIM 7/16DIN connector.

## Application Notes

- The SD310-HL is available in a half-wave configuration (P2) providing 1.5 dBd gain in a bidirectional pattern, and a quarter-wave configuration (P4) providing 2 dBd gain in an offset pattern.

| Region | United States | Europe, Middle East and Africa | Caribbean and Latin America | Canada and rest of the world |
| :--- | :---: | :---: | :---: | :---: |
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| Product Specification Sheet SD310-HF2P2LDF Issue: 6 Dated: 14-12-16 <br> EPR 017913    |  |  |  |  |

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| Electrical Specifications |  |  |
| :--- | :---: | :---: |
| Frequency Range | MHz | 406 to 470 |
| Bandwidth | MHz | 64 |
| Connector |  | $7 / 16 \mathrm{DIN}$-Female |
| Gain (nominal) | $1.5(3.6)$ |  |
| Input VSWR (max) |  | $1.5: 1$ |
| Polarization | $\Omega$ | vertical |
| Impedance |  | 50 |
| Pattern | degrees | Wi -directional |
| Vertical beamwidth (typ) | W | 78 |
| Average Power Input (max) | dBc | 75 |
| Passive intermod. (2x20W, 3rd ord.) |  | -150 |
| Lightning protection |  | DC ground |


| Mechanical Specifications |  |  |
| :---: | :---: | :---: |
| Width | in (mm) | 18.75 (476) |
| Depth | in (mm) | 3.5 (89) |
| Length/ Height | in (mm) | 48.13 (1223) |
| Base pipe diameter | in (mm) | 1.9 (48) |
| Base pipe mounting length | in (mm) | 18 (457) |
| Radiating element material |  | aluminum |
| Base pipe material |  | aluminum |
| Weight | lbs (kg) | 7 (3.18) |
| Weight iced ( $1 / 2^{\prime \prime} \mathrm{ice}$ ) | lbs (kg) | 11 (4.99) |
| Mounting Hardware (Optional) |  | Clamp015, Clamp130, or Clamp125U |
| Actual shipping weight | lbs (kg) | 13 (5.9) |
| Shipping dimensions | in (mm) | $63 \times 22 \times 4$ (1600x559x102) |
| Mounting configurations |  | Universal Mount |
| Recommended For Offset Side Mount: |  | SMK-125-A3 |


| Environmental Specifications |  |  |
| :---: | :---: | :---: |
| Temperature range | ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | -40 to $+140(-40$ to +60$)$ |
| Wind Loading Area (Flat Plate Equivalent) | $\mathrm{ft}^{2}\left(\mathrm{~m}^{2}\right)$ | 0.64 (0.06) |
| Wind Loading Area (1/2" ice) | $\mathrm{ft}^{2}\left(\mathrm{~m}^{2}\right)$ | 1.1 (0.1) |
| S Rated wind velocity (no ice) | $\mathrm{mph}(\mathrm{km} / \mathrm{h})$ | 265 (427) |
| - Rated wind velocity (1/2" radial ice) | $\mathrm{mph}(\mathrm{km} / \mathrm{h})$ | 210 (338) |
| ( Lateral thrust (100 mph No Ice) | lbs ( N ) | 23.1 (102.7) |
| (1) Torsional moment ( 100 mph No Ice) | ft-lbs (Nm) | 8.1 (10.9) |
| Bending moment ( 100 mph No Ice) | ft-lbs (Nm) | 29.6 (40) |
| Tip deflection (100 mph No Ice) | degrees | 0.04 |



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