







SD310-HF2P2LDF

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

Also referred as: SD310-HF2P2LDF(D00)

- · Covers 406-470 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, low-PIM 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 EPR 017913 Customer Tech Manual 005039 SD310-HF2P2LDF

Issue: 6

Dated: 14-12-16 Dated: 30-09-13



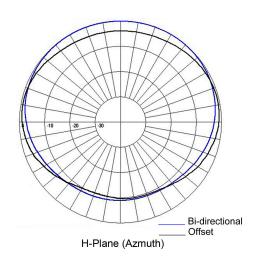
Antennas
UHF and Tetra Antennas
SD310-HL- PIM Certified Series

A Norsat Company Norsat International Inc.

Frequency Range	MHz	406 to 470	
Bandwidth	MHz	64	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	1.5 (3.6)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Bi-directional	
Vertical beamwidth (typ)	degrees	78	
Average Power Input (max)	W	75	
Passive intermod. (2x20W, 3rd ord.)	dBc	-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" ice)	lbs (kg)	11 (4.99)	
Mounting Hardware (Optional)	, ,,	Clamp005, Clamp015, Clamp130, or Clamp125L	
Actual shipping weight	lbs (kg)	13 (5.9)	
Shipping dimensions	in (mm)	63x22x4 (1600x559x102)	
Mounting configurations	,	Universal Mount	
Recommended For Offset Side Mount:		SMK-125-A3	

Environmental Specifications		
Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	0.64 (0.06)
Wind Loading Area (1/2" ice)	ft² (m²)	1.1 (0.1)
Rated wind velocity (no ice)	mph (km/h)	265 (427)
Rated wind velocity (1/2" radial ice)	mph (km/h)	210 (338)
Lateral thrust (100 mph No Ice)	lbs (N)	23.1 (102.7)
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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