

## Antennas UHF and Tetra Antennas SD318-HL- PIM Certified Series

## SD318-HF2P4LDF(D00) 8 dipole, 10.5 dBd, offset, low PIM, HD, 406-470 MHz

Also referred as: SD318-HF2P4LDF • 10.5 dBd gain with offset pattern, industry-leading -150 dBc PIM rating

- Heavy duty wind ratings, 300 W power handling
- 0, 2, 4, 6, 8, or 10 degrees electrical downtilt available
- Can be top or side mounted (universal mount)

### Recommend SMK-135-A3-T3 or SMK-135-A7-T3 for Offset Side Mount. Available from Sinclair separately.

The SD318-HL series is an extremely rugged 8-bay, low PIM exposed dipole antenna designed for applications where high gain is required. Due to its wide band and high power handling capability, this antenna is ideal for UHF trunking applications or multi-channel operation. With its industry-leading -150 dBc PIM rating, the probability of interference caused by intermodulation is low. The reliability and durability of this antenna make it well suited for mission critical applications such as public safety.

The design of these antennas provides coverage between 370 to 512 MHz in 3 subbands, 370-430 MHz, 406-470 MHz and 450-512 MHz for private mobile networks and public safety networks.

The standard connector offered is 7/16 DIN-Female.

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Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet EPR 017932		SD318-HF2P4LDF(D00)	Issue: 5	Dated: 14-12-16 Dated: 30-09-14
Customer Tech Manual 006079		Sinclair's commitment to product leadership may result in i	improvement or change to this product	

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# Antennas UHF and Tetra Antennas SD318-HL- PIM Certified Series

Electrical Specifications			Notes
Frequency Range	MHz	406 to 470	*1 : Qty 2
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	10.5 (12.6)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Offset	
Horizontal beamwidth (typ)	degrees	190	
Vertical beamwidth (typ)	degrees	9	
Average Power Input (max)	W	300	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
Lightning protection		DC ground	
Electrical tilt (available)		0,2,4,6,8, or 10 degrees	Ordering I
Front-to-back ratio (typ)	dB	9	Clamps mu

Ordering Information

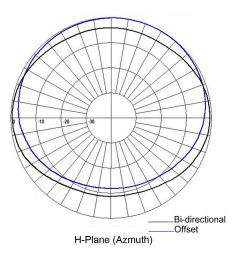
Clamps must be ordered separately

#### **Mechanical Specifications**

in (mm)	12.4 (315)	
in (mm)	3.5 (89)	
in (mm)	240 (6096)	
in (mm)	2.38 (60)	
in (mm)	120 (3048)	
lbs (kg)	56 (25.42)	
lbs (kg)	78 (35.41)	
	Clamp005, Clamp015, Clamp130, or Clamp125U	*1
lbs (kg)	85 (38.59)	
in (mm)	247x6x14 (6274x152x356)	
	Universal Mount	
	SMK-135-A3-T3 or SMK-135-A7-T3	
	in (mm) in (mm) in (mm) in (mm) Ibs (kg) Ibs (kg) Ibs (kg)	in (mm) 3.5 (89) in (mm) 240 (6096) in (mm) 2.38 (60) in (mm) 120 (3048) lbs (kg) 56 (25.42) lbs (kg) 78 (35.41) Clamp005, Clamp015, Clamp130, or Clamp125U lbs (kg) 85 (38.59) in (mm) 247x6x14 (6274x152x356) Universal Mount

### **Environmental Specifications**

Wind Loading Area (Flat Plate Equivalent) ft² (m²) 4.42 (0.41)   Wind Loading Area (1/2" ice) ft² (m²) 7.25 (0.67)	
1/(1 - 1) $1/2'' = 1$	
Wind Loading Area (1/2" ice) ft <sup>2</sup> (m <sup>2</sup> ) 7.25 (0.67)	
Rated wind velocity (no ice) mph (km/h) 150 (242)	
Rated wind velocity (1/2" radial ice) mph (km/h) 115 (185)	
Lateral thrust (100 mph No Ice) Ibs (N) 144 (640.5)	
Torsional moment (100 mph No Ice) ft-lbs (Nm) 29 (39.2)	
Bending moment (100 mph No Ice) ft-Ibs (Nm) 550 (742.5)	
Tip deflection (100 mph No Ice) degrees 1.2	



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