



SD 68 SERIE

SD-FM 87-194

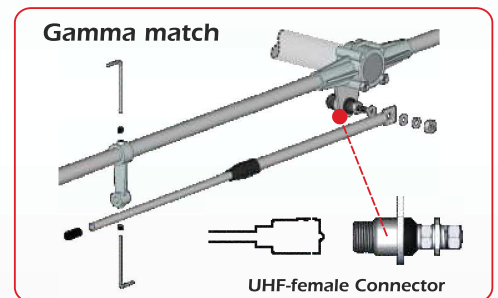
Sirio Dipole 68-88 MHz, 87...194 MHz

Features:

- # Directional base station antenna, Mono-band
- # SD68, SD78: frequency range 66-88 MHz for Low VHF applications. No tuning required
- # SD-FM 87-194: tunable from 87 to 194 MHz for FM applications
- # Made of aluminium alloy 6063 T-832
- # Steel bracket placed in the rear position for the best performance in vertical and horizontal polarization
- # UHF female connector
- # Vertical stacked array for higher gain
- # Gamma match feed system

Electrical Data	SD 68	SD 78	SD-FM 87-194
Type	Dipole		
Frequency Range	68 - 78 MHz @ SWR ≤ 1.5	78 - 88 MHz @ SWR ≤ 1.5	tunable 87...194 MHz
Impedance	50 Ω		
Radiation (H-plane)	beamwidth @ -3 dB = 240° (vertical polarization only)		
Radiation (E-plane)	beamwidth @ -3 dB = 80° (vertical polarization only)		
Front to back ratio	≥ 4 dB (vertical polarization only)		
Polarization	Linear Vertical or Horizontal		
Gain	1.85 dBd - 4 dBi (vertical polarization only)		
SWR @ res. freq.	/	/	≤ 1.2* @ 87 MHz
Bandwidth @ SWR ≤ 1.5	/	/	≥ 14.5* MHz @ 87 MHz
Max Power (CW) @ 30°C	350 Watts		300 Watts
Grounding Protection	All metal parts are DC-grounded, the inner conductor is coupled capacitively		
Connector	UHF-female		
Mechanical Data			
Materials	Aluminium, Die-cast zamak, zinc plated steel, Chromed Brass		
Wind Load @ 150 km/h	113 N	108 N	99 N
Wind Resistance	160 Km/h; 100 mi/h	160 Km/h; 100 mi/h	160 Km/h; 100 mi/h
Wind Surface	0.087 m ² ; 0.93 ft ²	0.084 m ² ; 0.89 ft ²	0.080 m ² ; 0.85 ft ²
Dimensions W x H (approx.)	1065x1912mm; 3.5x6.3ft	1065x1675mm; 3.5x5.5ft	1030x1600mm; 3.4x5.2ft
Turning radius (approx.)	1065* mm; 3.5* ft	1065* mm; 3.5* ft	990* mm; 3.2* ft
Weight (approx.)	2020 gr; 4.4 lb	1980 gr; 4.35 lb	1850 gr; 4.0 lb
Operating temperature	-40° C to +80° C		
Mounting Mast	Ø 35 - 52 mm; Ø 1.37 - 2.0 in		
Boom / Element Diameter	Ø 33 mm; 1.3 in / Ø 16 mm; 0.6 in		
P/N	2108801/68	2108801/78	2108801.00

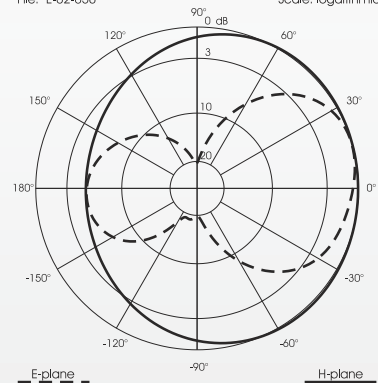
* Valid data only for vertical polarization



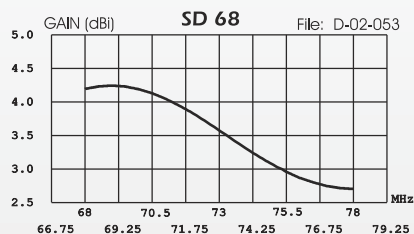
SD series

TYPICAL RADIATION PATTERN at 83 MHz

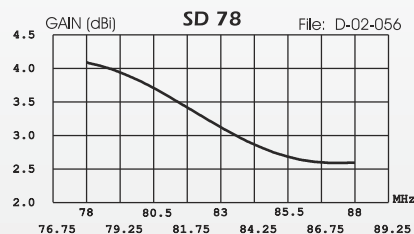
File: E-02-056 Scale: logarithmic



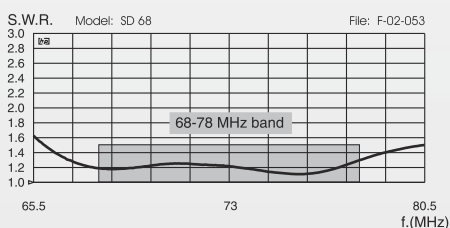
TYPICAL GAIN DIAGRAM vs FREQUENCY



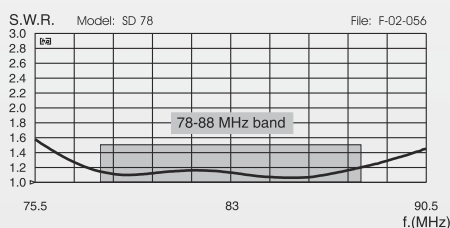
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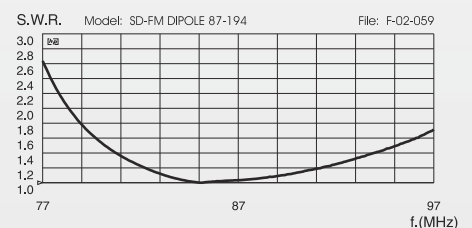
TYPICAL S.W.R. RESPONSE



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