

## SD210

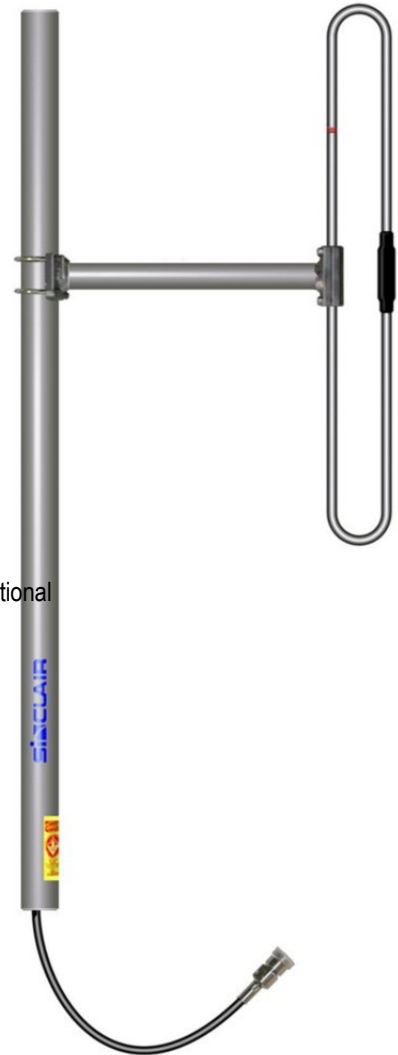
1 dipole antenna, 2.0/2.5 dBd gain, 118-225 MHz

- Covers 118-225 MHz in 3 band splits
- 2.0 dBd gain in elliptical (bi-directional) pattern (1/2 wave), 2.5 dBd gain in offset pattern (1/4 wave)
- 228 mph/ 367 kph survival wind rating
- Recommend using an SMK-125-A3 side mounting kit

The SD210 series of antennas is unique in its high efficiency and exceptionally wide bandwidth, covering the frequency ranges of 118-137 or 138-174 MHz at a VSWR of 1.5:1 or better. Because of its bandwidth, the SD210 series is perfectly suited for multicoupled systems.

Two model variants of this rugged antenna are available: Pattern adjustable version with external cable harness enabling its pattern to be changed in the field; and the fixed pattern versions (such as the 1/2 and 1/4 wave options), which cannot be adjusted in the field as the cable harness is inside the mast and dipole booms.

Model	Description	Pattern
<a href="#">SD210-HF1P4SNM(D0B)</a>	1 dipole antenna, 2 dBd gain, offset, 118-138 MHz	Offset
<a href="#">SD210-HF2P2SNM</a>	2.0 dBd gain, elliptical, N (male) connector, 138-174 MHz	Bi-directional
<a href="#">SD210-HF2P4SNM</a>	2.5 dBd gain, elliptical, N (male) connector, 138-174 MHz	Offset
<a href="#">SD210-SF1P2SNM</a>	2.0 dBd gain, elliptical, N (male) connector, 118-138 MHz	Bi-directional
<a href="#">SD210-SF1P4SNM</a>	2.5 dBd gain, offset, N (male) connector, 118-138 MHz	Offset
<a href="#">SD210-SF2P2SNM</a>	2.0 dBd gain, elliptical, N (male) connector, 138-174 MHz	Bi-directional
<a href="#">SD210-SF2P4SNM</a>	2.5 dBd gain, offset, N (male) connector, 138-174 MHz	Offset
<a href="#">SD210-SF2PASNM</a>	2.0/2.5 dBd gain, field adjustable, N (male) connector, 138-174 MHz	Offset or Bi-directional



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) 1223 42 03 03	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sincltech.com	salesuk@sincltech.com	salesla@sincltech.com	salescan@sincltech.com
Product Specification Sheet		SD210		Dated: 05-02-10

[SD210-HF1P4SNM\(D0B\)](#)

[SD210-HF2P2SNM](#)

[SD210-HF2P4SNM](#)

[SD210-SF1P2SNM](#)

**Electrical Specifications**

Frequency Range, MHz	118 to 138	138 to 174	138 to 174	118 to 138
Gain (nominal), dBd (dBi)	2 (4.1)	2 (4.1)	2.5 (4.6)	2 (4.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Impedance, $\Omega$	50			
Pattern	Offset	Bi-directional	Offset	Bi-directional
Horizontal beamwidth, degrees			210	
Vertical beamwidth, degrees	68	68	68	68
Average Power Input (max), W	200	200	200	200
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	20			
Front-to-back ratio (typ), dB			9	

**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	80 (2032)	60 (1524)	60 (1524)	60 (1524)
Width, in (mm)	28.1 (714)	39.5 (1003)	22 (559)	23 (584)
Depth, in (mm)	3.5 (89)	4.8 (121)	4.8 (121)	3 (76)
Base pipe diameter, in (mm)		2.9 (73)	2.9 (73)	1.9 (48)
Base pipe mounting length, in (mm)		24 (610)	24 (610)	24 (610)
Weight, lbs (kg)	18.5 (8.4)	21 (9.5)	18.5 (8.4)	8.3 (3.8)
Weight iced, lbs (kg)	42 (19.1)	43 (19.5)	39.5 (17.9)	
Actual Shipping weight, lbs (kg)				20 (9.1)
Shipping dimensions, in (mm)	84x48x6 (2134x1219x152)	66x42x0.5 (1676x1067x13)	66x24x0.6 (1676x610x15)	63x4x42 (1600x102x1067)
Mounting hardware		Clamps not supplied.	Clamps not supplied.	Clamps not supplied.

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) 1223 42 03 03	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		SD210		Dated: 05-02-10

[SD210-SF1P4SNM](#)

[SD210-SF2P2SNM](#)

[SD210-SF2P4SNM](#)

[SD210-SF2PASNM](#)

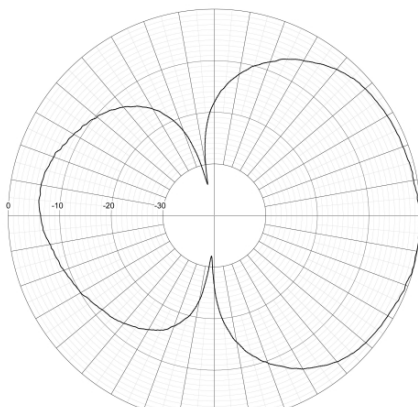
**Electrical Specifications**

Frequency Range, MHz	118 to 138	138 to 174	138 to 174	138 to 174
Gain (nominal), dBd (dBi)	2.5 (4.6)	2 (4.1)	2.5 (4.6)	2.5 (4.6)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Impedance, $\Omega$				
Pattern	Offset	Bi-directional	Offset	Offset or Bi-directional
Horizontal beamwidth, degrees	210		210	210
Vertical beamwidth, degrees	68	68	68	68
Average Power Input (max), W	200	200	200	200
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz				
Front-to-back ratio (typ), dB				

**Mechanical Specifications**

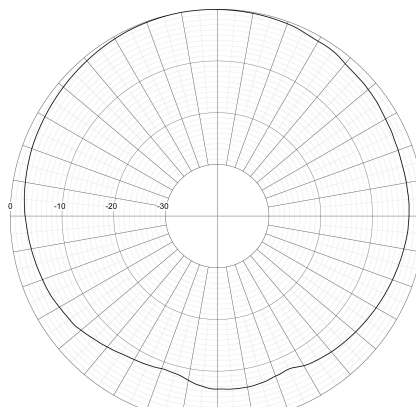
Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	60 (1524)	60 (1524)	60 (1524)	60 (1524)
Width, in (mm)	21 (533)	23 (584)	21 (533)	21 (533)
Depth, in (mm)	3 (76)	3 (76)	3 (76)	3 (76)
Base pipe diameter, in (mm)	1.9 (48)	1.9 (48)	1.9 (48)	1.9 (48)
Base pipe mounting length, in (mm)	24 (610)	24 (610)	24 (610)	24 (610)
Weight, lbs (kg)	8.3 (3.8)	8.3 (3.8)	8.3 (3.8)	8.3 (3.8)
Weight iced, lbs (kg)				
Actual Shipping weight, lbs (kg)	15 (6.8)	20 (9.1)	15 (6.8)	15 (6.8)
Shipping dimensions, in (mm)	63x4x42 (1600x102x1067)	63x4x42 (1600x102x1067)	63x4x42 (1600x102x1067)	68x7x8 (1727x178x203)
Mounting hardware	Clamps not supplied.	Clamps not supplied.	Clamps not supplied.	Clamps not supplied.

SINCLAIR TECHNOLOGIES



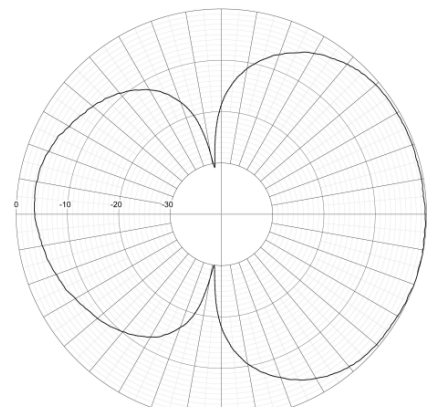
MEASURED RADIATION PATTERN  
Vertical  
Relative Gain - 10 dB per Division  
**SD210-HF1P4SNM(D0B)**

SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN  
Horizontal  
Relative Gain - 10 dB per Division  
**SD210-HF1P4SNM(D0B)**

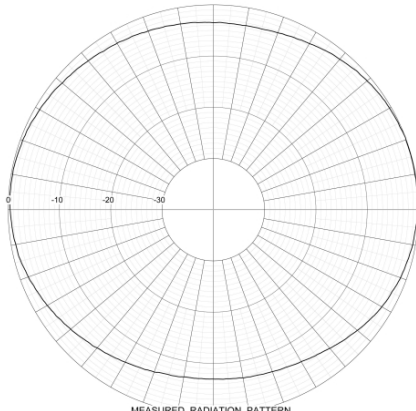
SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN  
Vertical  
Relative Gain - 10 dB per Division  
**SD210-HF2P2SNM**

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) 1223 42 03 03	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		SD210		Dated: 05-02-10

SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN  
Horizontal  
Relative Gain - 10 dB per Division

**SD210-HF2P2SNM**

www.sinctech.com

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) 1223 42 03 03	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		SD210		Dated: 05-02-10