

SY206EB

Yagi directional antenna, 9.5 dBd gain, extended boom, 138-174 MHz

- Six element extended boom yagi
- Outstanding durability and performance
- DC grounded for lightning protection

The SY206 antenna consists of a six-element yagi of outstanding durability and performance. All elements including the folded dipole are maintained at DC Ground potential for lightning protection. All elements on this antenna are attached to the boom with solid cast aluminum clamps.

This highly versatile antenna is supplied as a standard mount yagi, or, as an end-boom mounted unit.

As with other yagis, this VHF antenna is available in multiple-unit arrays for added gain. Horizontally or vertically parallel kits of 'H' frames can readily be supplied to mount two or four yagis with a common feed.



Model	Description	Pattern
SY206-SF1SNM(E)	9.5 dBd gain, N (male) connector, 148-152 MHz	Directional
SY206-SF2SNM(E)	9.5 dBd gain, N (male) connector, 152-159 MHz	Directional
SY206-SF3SNM(E)	9.5 dBd gain, N (male) connector, 157-164 MHz	Directional
SY206-SF4SNM(E)	9.5 dBd gain, N (male) connector, 162-169 MHz	Directional
SY206-SF5SNM(E)	9.5 dBd gain, N (male) connector, 167-174 MHz	Directional
SY206-SF6SNM(E)	9.5 dBd gain, N (male) connector, 138-143 MHz	Directional
SY206-SF7SNM(E)	9.5 dBd gain, N (male) connector, 143-148 MHz	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@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		SY206EB		Dated: 05-02-10

[SY206-SF1SNM\(E\)](#)

[SY206-SF2SNM\(E\)](#)

[SY206-SF3SNM\(E\)](#)

[SY206-SF4SNM\(E\)](#)

Electrical Specifications

Frequency Range, MHz	148 to 152	152 to 159	157 to 164	162 to 169
Gain (nominal), dBd (dBi)	9.5 (11.6)	9.5 (11.6)	9.5 (11.6)	9.5 (11.6)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical or horizontal	vertical or horizontal	vertical or horizontal	vertical or horizontal
Pattern	Directional	Directional	Directional	Directional
Horizontal beamwidth, degrees	56	56	56	56
Vertical beamwidth, degrees	46	46	46	46
Average Power Input (max), W	250	250	250	250
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	4	7	7	7
Front-to-back ratio (typ), dB	17	17	17	17

Mechanical Specifications

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	113.4 (2880)	113.4 (2880)	113.4 (2880)	113.4 (2880)
Width, in (mm)	42 (1067)	42 (1067)	42 (1067)	42 (1067)
Depth, in (mm)	6.1 (155)	6.1 (155)	6.1 (155)	6.1 (155)
Weight, lbs (kg)	12.5 (5.7)	12.5 (5.7)	12.5 (5.7)	12.5 (5.7)
Weight iced, lbs (kg)	43.5 (19.7)	43.5 (19.7)	43.5 (19.7)	43.5 (19.7)
Actual Shipping weight, lbs (kg)	45 (20.4)	45 (20.4)	45 (20.4)	45 (20.4)
Shipping dimensions, in (mm)	124.8x48x6 (3170x1219x152)	124.8x48x6 (3170x1219x152)	124.8x48x6 (3170x1219x152)	124.8x48x6 (3170x1219x152)

Environmental Specifications

Temperature range, °F (°C)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent), ft ² (m ²)	1.92 (0.18)	1.92 (0.18)	1.92 (0.18)	1.92 (0.18)

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[SY206-SF5SNM\(E\)](#)

[SY206-SF6SNM\(E\)](#)

[SY206-SF7SNM\(E\)](#)

Electrical Specifications

Frequency Range, MHz	167 to 174	138 to 143	143 to 148
Gain (nominal), dBd (dBi)	9.5 (11.6)	9.5 (11.6)	9.5 (11.6)
Input VSWR (max)	1.5:1	1.5:1	1.5:1
Polarization	vertical or horizontal	vertical or horizontal	vertical or horizontal
Pattern	Directional	Directional	Directional
Horizontal beamwidth, degrees	56	56	56
Vertical beamwidth, degrees	46	46	46
Average Power Input (max), W	250	250	250
Lightning protection	DC ground	DC ground	DC ground
Bandwidth, MHz	7	5	5
Front-to-back ratio (typ), dB	17	17	17

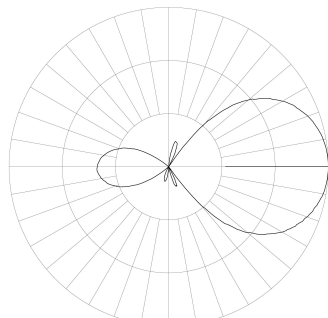
Mechanical Specifications

Connector	N (male)	N (male)	N (male)
Length/ Height, in (mm)	113.4 (2880)	113.4 (2880)	113.4 (2880)
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Environmental Specifications

Temperature range, °F (°C)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent), ft ² (m ²)	1.92 (0.18)	1.92 (0.18)	1.92 (0.18)

SINCLAIR TECHNOLOGIES

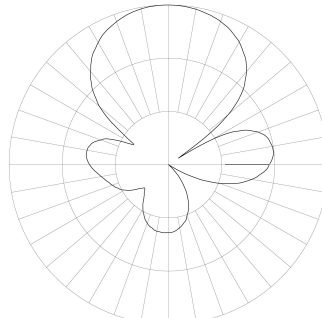


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SY206-SF1SNM(E)

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MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Azimuth
Relative Gain - 10 dB per Division

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