

**SY203EB**

Yagi directional antenna, 5.5 dBd gain, extended boom, 138-174 MHz

- Rugged 3 element yagi, 5.5 dBd gain, 138-174 MHz
- Designed for medium gain applications
- Extended boom for end mounting

The SY203-EB series of antennas consist of a 3-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 an end-boom mount yagi, or the SY203 series can be ordered for center-boom mounting.

As with other yagis, this VHF antenna is available in multiple-unit arrays for added gain.



Model	Description	Pattern
<a href="#">SY203-SF1SNM(E)</a>	5.5 dBd gain, N (male) connector, 138-144 MHz	Directional
<a href="#">SY203-SF2SNM(E)</a>	5.5 dBd gain, N (male) connector, 143-149 MHz	Directional
<a href="#">SY203-SF3SNM(E)</a>	5.5 dBd gain, N (male) connector, 148-154 MHz	Directional
<a href="#">SY203-SF4SNM(E)</a>	5.5 dBd gain, N (male) connector, 152-159 MHz	Directional
<a href="#">SY203-SF5SNM(E)</a>	5.5 dBd gain, N (male) connector, 157-164 MHz	Directional
<a href="#">SY203-SF6SNM(E)</a>	5.5 dBd gain, N (male) connector, 162-169 MHz	Directional
<a href="#">SY203-SF7SNM(E)</a>	5.5 dBd gain, N (male) connector, 167-174 MHz	Directional

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
<b>Telephone</b>	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
<b>E-mail</b>	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		SY203EB		Dated: 05-02-10

[SY203-SF1SNM\(E\)](#)

[SY203-SF2SNM\(E\)](#)

[SY203-SF3SNM\(E\)](#)

[SY203-SF4SNM\(E\)](#)

**Electrical Specifications**

Frequency Range, MHz	138 to 144	143 to 149	148 to 154	152 to 159
Gain (nominal), dBd (dBi)	5.5 (7.6)	5.5 (7.6)	5.5 (7.6)	5.5 (7.6)
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	87	87	87	87
Vertical beamwidth, degrees	61	61	61	61
Average Power Input (max), W	250	250	250	250
Bandwidth, MHz	6	6	6	7
Front-to-back ratio (typ), dB	12	12	12	12

**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	75.3 (1913)	75.3 (1913)	75.3 (1913)	75.3 (1913)
Width, in (mm)	42 (1067)	42 (1067)	42 (1067)	42 (1067)
Depth, in (mm)	6.5 (165)	6.5 (165)	6.5 (165)	6.5 (165)
Weight, lbs (kg)	5.5 (2.5)	5.5 (2.5)	5.5 (2.5)	5.5 (2.5)
Actual Shipping weight, lbs (kg)	15 (6.8)	15 (6.8)	20 (9.1)	15 (6.8)
Shipping dimensions, in (mm)	86x7x8 (2184x178x203)	86x7x8 (2184x178x203)	127x7x8 (3226x178x203)	86x7x8 (2184x178x203)

**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 <sup>2</sup> (m <sup>2</sup> )	1.05 (0.1)	1.05 (0.1)	1.05 (0.1)	1.05 (0.1)

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[SY203-SF5SNM\(E\)](#)

[SY203-SF6SNM\(E\)](#)

[SY203-SF7SNM\(E\)](#)

**Electrical Specifications**

Frequency Range, MHz	157 to 164	162 to 169	167 to 174
Gain (nominal), dBd (dBi)	5.5 (7.6)	5.5 (7.6)	5.5 (7.6)
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	87	87	87
Vertical beamwidth, degrees	61	61	61
Average Power Input (max), W	250	250	250
Bandwidth, MHz	7	7	7
Front-to-back ratio (typ), dB	12	12	12

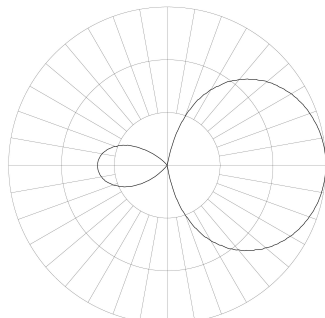
**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)
Length/ Height, in (mm)	75.3 (1913)	75.3 (1913)	75.3 (1913)
Width, in (mm)	42 (1067)	42 (1067)	42 (1067)
Depth, in (mm)	6.5 (165)	6.5 (165)	6.5 (165)
Weight, lbs (kg)	5.5 (2.5)	5.5 (2.5)	5.5 (2.5)
Actual Shipping weight, lbs (kg)	15 (6.8)	15 (6.8)	15 (6.8)
Shipping dimensions, in (mm)	86x7x8 (2184x178x203)	86x7x8 (2184x178x203)	86x7x8 (2184x178x203)

**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 <sup>2</sup> (m <sup>2</sup> )	1.05 (0.1)	1.05 (0.1)	1.05 (0.1)

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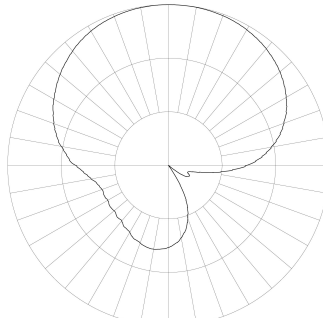


MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Elevation  
Relative Gain - 10 dB per Division

SY203-SF1SNM(E)

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MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Azimuth  
Relative Gain - 10 dB per Division

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