

**SY3074**

Yagi directional antenna, 15 dBd gain, black anodized, quad, 340-512 MHz

- Four rugged 7-element yagi antenna providing 15 dBd gain
- 3/8 inch aluminum reflector/director elements with 360 degree welds
- Anodized for extended life and superior performance in harsh environments

The SY3074 is a quad yagi antenna providing gain of 15 dBd. Reflector and director elements are 3/8 inch diameter aluminum rods welded with 360 degree welds to a heavy-gauge boom and anodized for extended life and low-PIM performance in heavy ice or corrosive environments.

**Model**

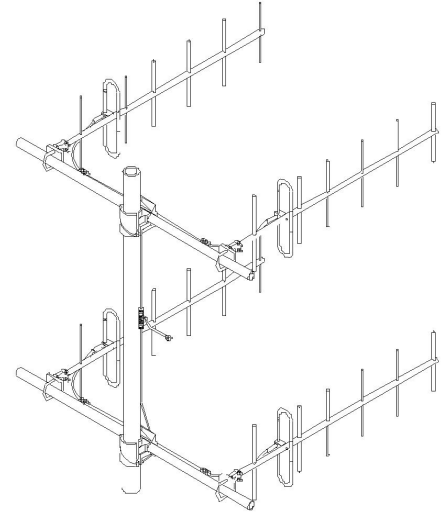
- [SY3074-SF1SNM](#)
- [SY3074-SF2SNM](#)
- [SY3074-SF3SNM](#)
- [SY3074-SF4SNM](#)
- [SY3074-SF5SNM](#)
- [SY3074-SF6SNM](#)
- [SY3074-SF7SNM](#)
- [SY3074-SF8SNM](#)
- [SY3074-SF9SNM](#)

**Description**

- 15 dBd gain, N (male) connector, 403-430 MHz
- 15 dBd gain, N (male) connector, 430-450 MHz
- 15 dBd gain, N (male) connector, 450-470 MHz
- 15 dBd gain, N (male) connector, 470-490 MHz
- 15 dBd gain, N (male) connector, 490-512 MHz
- 15 dBd gain, N (male) connector, 340-360 MHz
- 15 dBd gain, N (male) connector, 360-380 MHz
- 15 dBd gain, N (male) connector, 380-400 MHz
- 15 dBd gain, N (male) connector, 440-460 MHz

**Pattern**

- Directional
- Directional
- Directional
- Directional
- Directional
- Directional
- Directional
- Directional
- Directional



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Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specification Sheet		SY3074		Dated: 05-02-10

[SY3074-SF1SNM](#)

[SY3074-SF2SNM](#)

[SY3074-SF3SNM](#)

[SY3074-SF4SNM](#)

**Electrical Specifications**

	SY3074-SF1SNM	SY3074-SF2SNM	SY3074-SF3SNM	SY3074-SF4SNM
Frequency Range, MHz	403 to 430	430 to 450	450 to 470	470 to 490
Gain (nominal), dBd (dBi)	15 (17.1)	15 (17.1)	15 (17.1)	15 (17.1)
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	22	22	22	22
Vertical beamwidth, degrees	19	19	19	19
Average Power Input (max), W	250	250	250	250
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	27	20	20	20
Front-to-back ratio (typ), dB	20	20	20	20

**Mechanical Specifications**

	SY3074-SF1SNM	SY3074-SF2SNM	SY3074-SF3SNM	SY3074-SF4SNM
Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	57 (1448)	57 (1448)	57 (1448)	57 (1448)
Width, in (mm)	38.5 (978)	38.5 (978)	38.5 (978)	38.5 (978)
Depth, in (mm)	47 (1194)	47 (1194)	47 (1194)	47 (1194)
Weight, lbs (kg)	25 (11.4)	25 (11.4)	25 (11.4)	25 (11.4)
Actual Shipping weight, lbs (kg)	32 (14.5)	32 (14.5)	32 (14.5)	32 (14.5)
Shipping dimensions, in (mm)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)

**Environmental Specifications**

	SY3074-SF1SNM	SY3074-SF2SNM	SY3074-SF3SNM	SY3074-SF4SNM
Temperature range, °F (°C)	-40 to +140 (-40 to +60)			
Wind Loading Area (Flat Plate Equivalent), ft <sup>2</sup> (m <sup>2</sup> )	1.6 (0.15)	1.6 (0.15)	1.6 (0.15)	1.6 (0.15)

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E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
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[SY3074-SF5SNM](#)

[SY3074-SF6SNM](#)

[SY3074-SF7SNM](#)

[SY3074-SF8SNM](#)

**Electrical Specifications**

Frequency Range, MHz	490 to 512	340 to 360	360 to 380	380 to 400
Gain (nominal), dBd (dBi)	15 (17.1)	15 (17.1)	15 (17.1)	15 (17.1)
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	22	22	22	22
Vertical beamwidth, degrees	19	19	19	19
Average Power Input (max), W	250	250	250	250
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	20	20	20	20
Front-to-back ratio (typ), dB	20	20	20	20

**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	57 (1448)	57 (1448)	57 (1448)	57 (1448)
Width, in (mm)	38.5 (978)	38.5 (978)	38.5 (978)	38.5 (978)
Depth, in (mm)	47 (1194)	47 (1194)	47 (1194)	47 (1194)
Weight, lbs (kg)	25 (11.4)	25 (11.4)	25 (11.4)	25 (11.4)
Actual Shipping weight, lbs (kg)	32 (14.5)	32 (14.5)	32 (14.5)	32 (14.5)
Shipping dimensions, in (mm)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)	47x6x8 (1194x152x203)

**Environmental Specifications**

Temperature range, °F (°C)				
Wind Loading Area (Flat Plate Equivalent), ft <sup>2</sup> (m <sup>2</sup> )	1.6 (0.15)	1.6 (0.15)	1.6 (0.15)	1.6 (0.15)

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SY3074-SF9SNM

**Electrical Specifications**

Frequency Range, MHz	440 to 460
Gain (nominal), dBd (dBi)	15 (17.1)
Input VSWR (max)	1.5:1
Polarization	vertical or horizontal
Pattern	Directional
Horizontal beamwidth, degrees	22
Vertical beamwidth, degrees	19
Average Power Input (max), W	250
Lightning protection	DC ground
Bandwidth, MHz	20
Front-to-back ratio (typ), dB	20

**Mechanical Specifications**

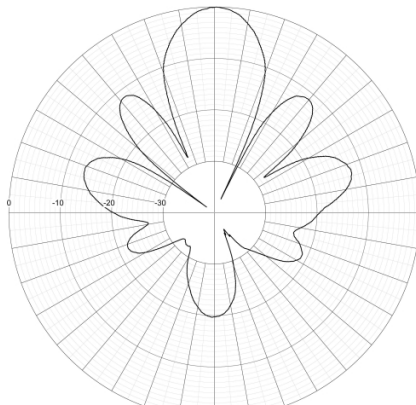
Connector	N (male)
Length/ Height, in (mm)	57 (1448)
Width, in (mm)	38.5 (978)
Depth, in (mm)	47 (1194)
Weight, lbs (kg)	25 (11.4)
Actual Shipping weight, lbs (kg)	32 (14.5)
Shipping dimensions, in (mm)	47x6x8 (1194x152x203)

**Environmental Specifications**

Temperature range, °F (°C)	
Wind Loading Area (Flat Plate Equivalent), ft <sup>2</sup> (m <sup>2</sup> )	1.6 (0.15)

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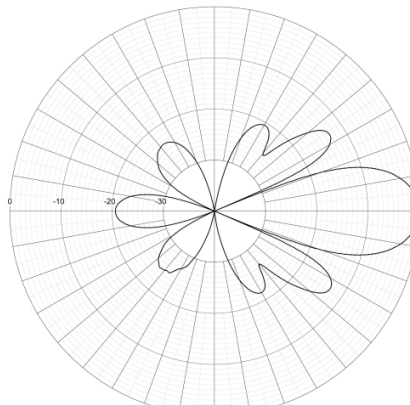
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MEASURED RADIATION PATTERN  
Horizontal  
Relative Gain - 10 dB per Division

SY3074-SF1SNM

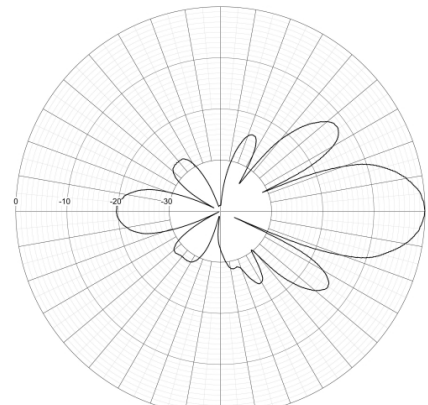
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MEASURED RADIATION PATTERN  
Vertical  
Relative Gain - 10 dB per Division

SY3074-SF1SNM

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MEASURED RADIATION PATTERN  
Vertical  
Relative Gain - 10 dB per Division

SY3074-SF2SNM

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