

SY406

Yagi directional antenna, 10 dBd gain, black anodized, 746-985 MHz

- Anodized high-grade aluminum
- 360 degree welded elements, completely sealed dipole for durability in harsh environments
- 10 dBd gain with low VSWR

The SY406 yagi antenna has been developed to meet the need for a high gain, broadband, top quality directional antenna in the 746-985 MHz frequency range. The SY406 provides 10 dBd gain with a low VSWR.

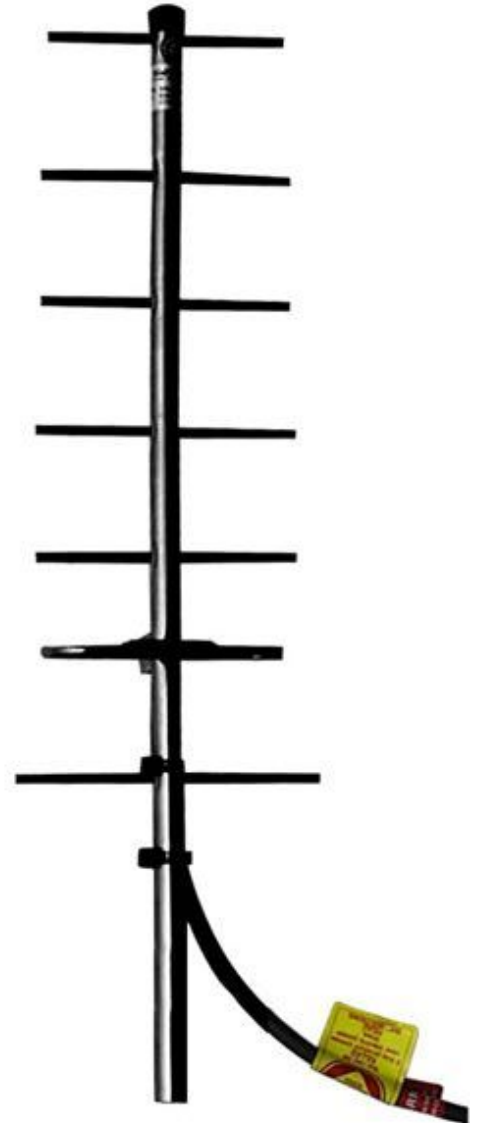
Designed for high performance, versatility and ease of installation, the SY406 will fill a wide variety of requirements.

All elements are DC grounded for lightning protection.

Application Notes

- Stacking of yagis provides increased gain. Stacking kits are available for 2 and 4 antenna configurations

Model	Description	Pattern
SY406-SF1SNM(ABK)	10 dBd gain, N (male) connector, 806-870 MHz	Directional
SY406-SF2SNM(ABK)	10 dBd gain, N (male) connector, 824-896 MHz	Directional
SY406-SF3SNM(ABK)	10 dBd gain, N (male) connector, 846-925 MHz	Directional
SY406-SF4SNM(ABK)	10 dBd gain, N (male) connector, 895-966 MHz	Directional
SY406-SF5SNM(ABK)	10 dBd gain, N (male) connector, 835-900 MHz	Directional
SY406-SF6SNM(ABK)	10 dBd gain, N (male) connector, 920-985 MHz	Directional
SY406-SF7SNM(ABK)	10 dBd gain, N (male) connector, 746-806 MHz	Directional



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		SY406		Dated: 05-02-10

[SY406-SF1SNM\(ABK\)](#)

[SY406-SF2SNM\(ABK\)](#)

[SY406-SF3SNM\(ABK\)](#)

[SY406-SF4SNM\(ABK\)](#)

Electrical Specifications

	806 to 870	824 to 896	846 to 925	895 to 966
Frequency Range, MHz	806 to 870	824 to 896	846 to 925	895 to 966
Gain (nominal), dBd (dBi)	10 (12.1)	10 (12.1)	10 (12.1)	10 (12.1)
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	52	52	52	52
Vertical beamwidth, degrees	45	45	45	45
Average Power Input (max), W	125	125	125	125
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	64	72	79	71
Front-to-back ratio (typ), dB	20	20	20	20

Mechanical Specifications

	N (male)	N (male)	N (male)	N (male)
Connector	N (male)	N (male)	N (male)	N (male)
Length/ Height, in (mm)	24 (610)	24 (610)	24 (610)	24 (610)
Width, in (mm)	7.1 (180)	7.1 (180)	7.1 (180)	7.1 (180)
Depth, in (mm)	2.6 (67)	2.6 (67)	2.6 (67)	2.6 (67)
Weight, lbs (kg)	1.1 (0.5)	1.1 (0.5)	1.1 (0.5)	1.1 (0.5)
Finish	anodize black	anodize black	anodize black	anodize black
Weight iced, lbs (kg)	4.7 (2.1)	4.7 (2.1)	4.7 (2.1)	4.7 (2.1)
Actual Shipping weight, lbs (kg)	5 (2.3)	5 (2.3)	5 (2.3)	5 (2.3)
Shipping dimensions, in (mm)	42x6x2 (1067x152x51)	42x6x2 (1067x152x51)	42x6x2 (1067x152x51)	42x6x2 (1067x152x51)
Mounting hardware	#115 clamp	#115 clamp	#115 clamp	#115 clamp

Environmental Specifications

	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)
Temperature range, °F (°C)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)
Wind Loading Area (Flat Plate Equivalent), ft ² (m ²)	0.18 (0.02)	0.18 (0.02)	0.18 (0.02)	0.18 (0.02)

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

[SY406-SF5SNM\(ABK\)](#)

[SY406-SF6SNM\(ABK\)](#)

[SY406-SF7SNM\(ABK\)](#)

Electrical Specifications

Frequency Range, MHz	835 to 900	920 to 985	746 to 806
Gain (nominal), dBd (dBi)	10 (12.1)	10 (12.1)	10 (12.1)
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	52	52	52
Vertical beamwidth, degrees	45	45	45
Average Power Input (max), W	125	125	125
Lightning protection	DC ground	DC ground	DC ground
Bandwidth, MHz	65	65	60
Front-to-back ratio (typ), dB	20	20	20

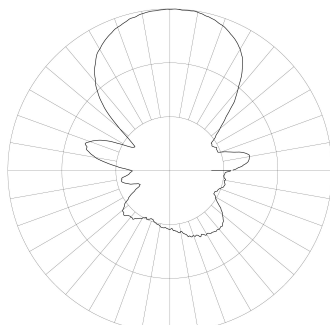
Mechanical Specifications

Connector	N (male)	N (male)	N (male)
Length/ Height, in (mm)	24 (610)	24 (610)	24 (610)
Width, in (mm)	7.1 (180)	7.1 (180)	7.1 (180)
Depth, in (mm)	2.6 (67)	2.6 (67)	2.6 (67)
Weight, lbs (kg)	1.1 (0.5)	1.1 (0.5)	1.1 (0.5)
Finish	anodize black	anodize black	anodize black
Weight iced, lbs (kg)	4.7 (2.1)	4.7 (2.1)	4.7 (2.1)
Actual Shipping weight, lbs (kg)	5 (2.3)	5 (2.3)	5 (2.3)
Shipping dimensions, in (mm)	42x6x2 (1067x152x51)	42x6x2 (1067x152x51)	42x6x2 (1067x152x51)
Mounting hardware	#115 clamp	#115 clamp	#115 clamp

Environmental Specifications

Temperature range, °F (°C)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)	-22 to +140 (-30 to +60)
Wind Loading Area (Flat Plate Equivalent), ft² (m²)	0.18 (0.02)	0.18 (0.02)	0.18 (0.02)

SINCLAIR TECHNOLOGIES

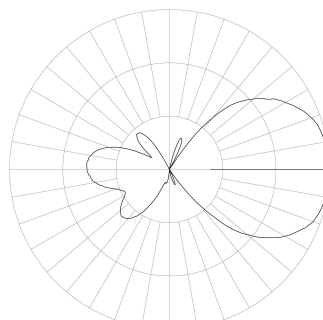


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Azimuth
Relative Gain - 10 dB per Division

SY406-SF1SNM(ABK)

SINCLAIR TECHNOLOGIES

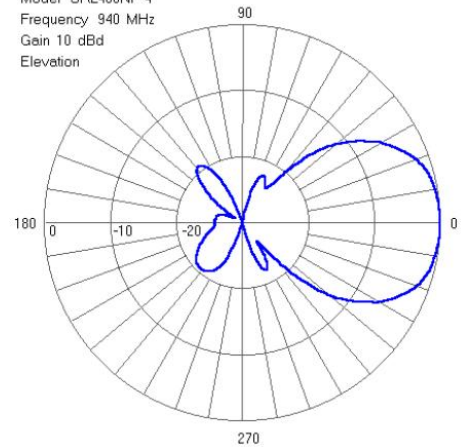


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

SY406-SF1SNM(ABK)

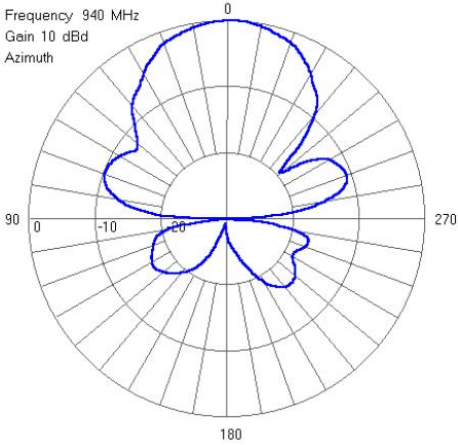
Model SRL406NF*4
Frequency 940 MHz
Gain 10 dBd
Elevation



SY406-SF4SNM(ABK)

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		SY406		Dated: 05-02-10

Model SRL406NF*4
Frequency 940 MHz
Gain 10 dBd
Azimuth



SY406-SF4SNM(ABK)

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		SY406		Dated: 05-02-10