

# 700/800 MHz Antennas

## Broadband Coverage



SINCLAIR

### Sinclair 700/800 MHz Antennas

Sinclair's current 700/ 800 MHz band products have been expanded to meet the changes to the public safety frequency bands in North America. Sinclair's new offerings include multiple port antennas, high-gain Yagis, enclosed dipole arrays, high gain collinear omnis, and mobile/transport antennas.

To complement our comprehensive line of 800 MHz filter products, Sinclair has released a full line of 700/800 MHz band products.

[www.sinctech.com](http://www.sinctech.com)

ANTENNAS  
FILTERS  
DUPLEXERS  
MULTICOUPLERS  
COMBINERS  
SYSTEMS

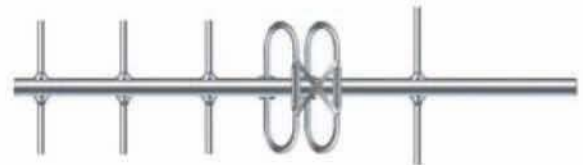
## Sinclair 700/800 MHz Antenna Products



### SC432 Series

Sinclair's new line of high isolation, low PIM, multi-port, collinear antennas are now available. Incorporating a triple port design, you effectively have multiple antennas combined into a single radome with 45 dB and 40 dB of isolation.

MODEL NUMBERS	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	ISOLATION BETWEEN SECTIONS (db)	LENGTH (inches/cm)
SC432D-HF6LDF(I45-G00)	746 - 869	0 / 2.1	300	45	79.5 / 201.9
SC432D-HF6LDF(I45-G03)	746 - 869	3 / 5.1	300	45	134 / 340.4
SC432T-HF6LDF(I45-G00)	746 - 869	0 / 2.1	300	45	134 / 340.4
SC432D-HF6LDF(I40-G06)	746 - 869	6 / 8.1	300	40	172.5 / 438.1



### SY450 Series

Sinclair's new broadband, 6.5 dBd gain Yagi antenna utilizes an innovative design to provide versatility and ease of installation. It is an ideal solution for a wide variety of applications where high gain, low cost and high performance is necessary.

MODEL NUMBER	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	LENGTH (inches/cm)
SY450-SF1SNM	746 - 896	6.5 / 8.6	100	22.5 / 57.2

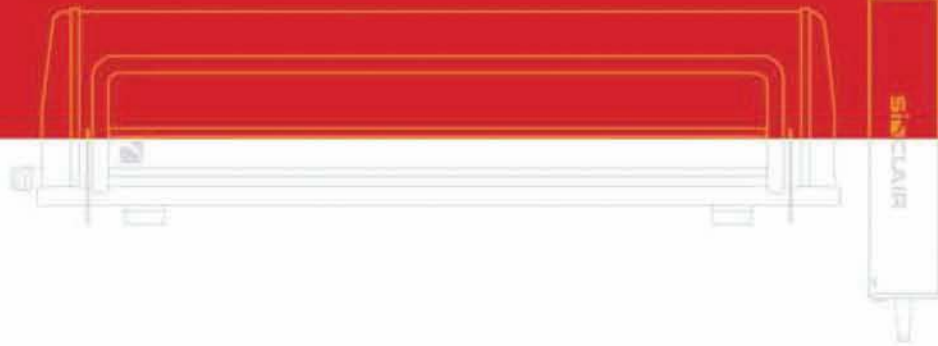


### SE414 and SE419 Series

Sinclair's SE414 and SE419 series of enclosed dipole arrays offers low PIM performance with sub-bands spanning the 746-960 MHz frequency range (SF1 sub-band covers 806-896 MHz, SF2: 850-960 MHz and SF3: 746-869 MHz).

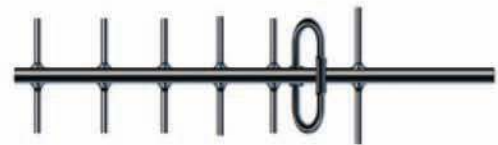
The SE414 and SE419 series are available with field adjustable reflectors that provide horizontal beam-widths between 60 and 160 degrees, and gains from 8-11 dBd (SE414-SF3PALDF) and 10.5-15 dBd (SE419-SF3PALDF). Their design and construction permits excellent pattern control, greater efficiency and a high front-to-back ratio. The feed harness and other internal components are sealed within a durable ABS radome that ensures excellent protection from the environment.





### SE414 and SE419 Series

MODEL NUMBERS	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	HORIZONTAL BEAMWIDTH (degrees)
SE414-SF3P2LDF	746 - 869	7.5 / 9.6	500	bidirectional
SE414-SF3P4LDF	746 - 869	7.5 / 9.6	500	180
SE414-SF3PALDF	746 - 869	8 - 11 / 10.1 - 13.2	500	60 - 160
SE419-SF3P2LDF	746 - 869	10 / 12.1	500	bidirectional
SE419-SF3P4LDF	746 - 869	10 / 12.1	500	180
SE419-SF3PALDF	746 - 869	10.5 - 15 / 12.6 - 17.1	500	60 - 160



### SY406 and SY407 Series

Sinclair's popular SY406 series of Yagi antennas has been expanded to also cover applications in the 746-806 MHz frequency range while the SY407 series has been optimized for dual band applications and covers the frequency range 746-869 MHz. Using a high-grade aluminum with completely sealed dipoles for increased durability, the SY406 and SY407 are designed to withstand harsh environmental conditions.

MODEL NUMBERS	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	LENGTH (inches/cm)
SY406-SF7SNM	746 - 806	10 / 12.1	125	24 / 61
SY407-SF2SNM	746 - 869	10 / 12.1	125	24 / 61



### ST421R Series

The latest addition to Sinclair's Excaliber™ line is the ST421R. This model was specifically designed to meet the new GSM-R European Rail Standard for radio communications in the 870 - 960 MHz band. Now this antenna can operate in the 764-806 MHz or 806-870 MHz frequency range. The GSM-R standard is being adopted by many countries around the world for voice and data railway services, including public safety. The ST421R uses a rugged, low profile, radome enclosed design, only 53 mm in height, making it an attractive solution for applications requiring minimal mounting space and maximum head room clearance.

MODEL NUMBERS	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	LENGTH (inches/cm)
ST421R-SF1SNF	764-806	0 / 2.1	200	7.5 / 19
ST421R-SF2SNF	806-870	0 / 2.1	200	7.5 / 19

### SC479 Series



Sinclair's SC479 series was developed to offer a low cost, broadband antenna in 746-869 MHz frequency range. With a total height of 178 inches (452 cm) and 3 inches (7.62 cm) in diameter it is ideal for applications with limited tower space. Offering 9 dBd of gain and 500 watts of power handling, it is engineered to provide low PIM performance.

MODEL NUMBER	FREQUENCY RANGE (MHz)	GAIN (dBd/dBi)	AVERAGE INPUT POWER (max) (watts)	LENGTH
SC479-HF1LDF	746-869	9 / 11.1	500	178 / 452.1

**SINCLAIR**<sup>®</sup>  
Superior then, Superior now.  
A DIVISION OF NORSAT INTERNATIONAL INC.



RELIABILITY  
SECURITY  
CUSTOMIZATION  
COVERAGE

Sinclair provides antennas, filters, combining systems, and radio coverage solutions for RF telecommunications networks. Designed to function in extreme weather conditions, Sinclair's products enjoy a reputation for high performance, reliability, durability and value. We have been serving our markets with new innovative products for over 57 years.

**Sinclair Technologies**  
[www.sinctech.com](http://www.sinctech.com)

**Distributed in the  
United States by:**

**Tessco Technologies**  
Tel: (800) 508-5444  
[www.tessco.com](http://www.tessco.com)

**Primus Electronics Corp**  
Tel: (800) 435-1636  
[www.primuselectronics.com](http://www.primuselectronics.com)

**Talley Communications**  
Tel: (800) 949-7099  
[www.talleycom.com](http://www.talleycom.com)

**Motorola U.S.A.**  
Tel: (800) 422-4210 x 6883  
[www.motorola.com](http://www.motorola.com)

**Distributed in  
Canada by:**

**Mobile Trends**  
Tel: (800) 665-2955  
[www.mobiletrends.ca](http://www.mobiletrends.ca)

**Omni Provincial Electronics**  
Tel: (877) 291-9633  
[www.omnipro.ca](http://www.omnipro.ca)

**Production électronique inc.**  
Tel: (877) 359-0523  
[www.productionelectronique.ca](http://www.productionelectronique.ca)

**Waverunner Communications**  
Tel: (888) 561-1113  
[www.waverun.net](http://www.waverun.net)

**U.S.A.**  
Tel: 1(800) 263-3275  
Fax: 1(716) 874-4007

**Canada**  
Tel: 1(800) 263-3275  
Fax: 1(800) 668-7416

**Europe, Middle East  
and Africa**  
Tel: 44(0)1223 42 03 03  
Fax: 44(0)1223 42 06 06

**Asia**  
Tel: 1(905) 727-0165  
Fax: 1(905) 841-6255

**Caribbean and Latin  
America**  
Tel: 1(305) 235-2706  
Fax: 1(305) 971-8991