

## ST321

Mobile omni antenna, 0 dBd gain, low profile, 406-512 MHz

- Compact, low profile
- Cast aluminum antenna designed for use in both fixed and mobile installations
- Renown for its years of reliable service in very harsh environmental conditions

Sinclair's ST321 series of UHF transit antennas are low profile rugged alternative to quarter wave whips. These antennas are an excellent choice for low clearance applications on trains, public transit vehicles, construction equipment, police vehicles, etc.

The antenna is supplied with the appropriate hardware to ensure a weather proof installation.

The ST321 series of antennas are of a high strength cast aluminum design.

Minimum 30" x 30" ground plane is required.



Model	Description	Pattern
<a href="#">ST321-SF2SUF</a>	0 dBd gain, UHF-female connector, 410-420 MHz	Omni-directional
<a href="#">ST321-SF3SNF</a>	0 dBd gain, N-female connector, 450-465 MHz	Omni-directional
<a href="#">ST321-SF4SUF</a>	0 dBd gain, UHF-female connector, 455-470 MHz	Omni-directional
<a href="#">ST321-SF5SNF</a>	0 dBd gain, N-female connector, 470-485 MHz	Omni-directional
<a href="#">ST321-SF5SUF</a>	0 dBd gain, UHF-female connector, 470-485 MHz	Omni-directional
<a href="#">ST321-SF7SUF</a>	0 dBd gain, UHF-female connector, 430-440 MHz	Omni-directional
<a href="#">ST321-SF8SUF</a>	0 dBd gain, UHF-female connector, 440-450 MHz	Omni-directional
<a href="#">ST321-SF9SNF</a>	0 dBd gain, N-female connector, 420-430 MHz	Omni-directional
<a href="#">ST321-ST1SNF</a>	0 dBd gain, N-female connector, 380-400 MHz	Omni-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		ST321		Dated: 05-02-10

[ST321-SF2SUF](#)

[ST321-SF3SNF](#)

[ST321-SF4SUF](#)

[ST321-SF5SNF](#)

**Electrical Specifications**

Frequency Range, MHz	410 to 420	450 to 465	455 to 470	470 to 485
Gain (nominal), dBd (dBi)	unity (2.1)	unity (2.1)	unity (2.1)	unity (2.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Impedance, $\Omega$	50	50	50	50
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Average Power Input (max), W	50	50	50	50
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	15	15	15	15

**Mechanical Specifications**

Connector	UHF (female)	N (female)	UHF (female)	N (female)
Length/ Height, in (mm)	2.5 (64)	2.5 (64)	2.5 (64)	2.5 (64)
Width, in (mm)	2.5 (64)	2.5 (64)	2.5 (64)	2.5 (64)
Depth, in (mm)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)
Weight, lbs (kg)	1 (0.5)	1 (0.5)	1 (0.5)	1 (0.5)
Actual Shipping weight, lbs (kg)	3 (1.4)	3 (1.4)	3 (1.4)	3 (1.4)
Shipping dimensions, in (mm)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)
Length, in (mm)				
Mounting hardware	Supplied	Supplied	Supplied	Supplied

**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)
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ST321-SF5SUF

ST321-SF7SUF

ST321-SF8SUF

ST321-SF9SNF

**Electrical Specifications**

Frequency Range, MHz	470 to 485	430 to 440	440 to 450	420 to 430
Gain (nominal), dBd (dBi)	unity (2.1)	unity (2.1)	unity (2.1)	unity (2.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Impedance, $\Omega$	50	50	50	50
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Average Power Input (max), W	50	50	50	50
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	15	15	15	15

**Mechanical Specifications**

Connector	UHF (female)	UHF (female)	UHF (female)	N (female)
Length/ Height, in (mm)	2.5 (64)	2.5 (64)	2.5 (64)	2.5 (64)
Width, in (mm)	2.5 (64)	2.5 (64)	2.5 (64)	2.5 (64)
Depth, in (mm)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)
Weight, lbs (kg)	1 (0.5)	1 (0.5)	1 (0.5)	1 (0.5)
Actual Shipping weight, lbs (kg)	3 (1.4)	3 (1.4)	3 (1.4)	3 (1.4)
Shipping dimensions, in (mm)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)	4.8x7.3x10.8 (121x184x273)
Length, in (mm)				
Mounting hardware	Supplied	Supplied	Supplied	Supplied

**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)
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ST321-ST1SNF

**Electrical Specifications**

Frequency Range, MHz	380 to 400
Gain (nominal), dBd (dBi)	unity (2.1)
Input VSWR (max)	2:1
Polarization	vertical
Impedance, $\Omega$	50
Pattern	Omni-directional
Average Power Input (max), W	50
Lightning protection	DC ground
Bandwidth, MHz	15

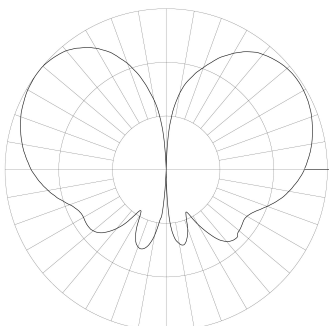
**Mechanical Specifications**

Connector	N (female)
Length/ Height, in (mm)	2.5 (64)
Width, in (mm)	2.5 (64)
Depth, in (mm)	7.5 (191)
Weight, lbs (kg)	1 (0.5)
Actual Shipping weight, lbs (kg)	3 (1.4)
Shipping dimensions, in (mm)	4.8x7.3x10.8 (121x184x273)
Length, in (mm)	7.5 (191)
Mounting hardware	Supplied

**Environmental Specifications**

Temperature range, °F (°C)	-40 to +140 (-40 to +60)
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SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Elevation  
Relative Gain - 10 dB per Division

ST321-SF2SUF

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