

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 |
|------------------------------|---|------------------|
| ST321-SF2SUF | 0 dBd gain, UHF-female connector, 410-420 MHz | Omni-directional |
| ST321-SF3SNF | 0 dBd gain, N-female connector, 450-465 MHz | Omni-directional |
| ST321-SF4SUF | 0 dBd gain, UHF-female connector, 455-470 MHz | Omni-directional |
| ST321-SF5SNF | 0 dBd gain, N-female connector, 470-485 MHz | Omni-directional |
| ST321-SF5SUF | 0 dBd gain, UHF-female connector, 470-485 MHz | Omni-directional |
| ST321-SF7SUF | 0 dBd gain, UHF-female connector, 430-440 MHz | Omni-directional |
| ST321-SF8SUF | 0 dBd gain, UHF-female connector, 440-450 MHz | Omni-directional |
| ST321-SF9SNF | 0 dBd gain, N-female connector, 420-430 MHz | Omni-directional |
| ST321-ST1SNF | 0 dBd gain, N-female connector, 380-400 MHz | Omni-directional |



Australian Representatives
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| 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 | | 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, Ω | 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, Ω | 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, Ω | 50 |
| Pattern | Omni-directional |
| Average Power Input (max), W | 50 |
| Lightning protection | DC ground |
| Bandwidth, MHz | 15 |

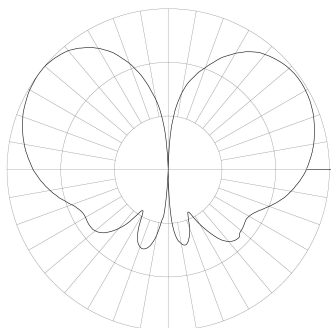
Mechanical Specifications

| | |
|----------------------------------|----------------------------|
| 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) |
|----------------------------|--------------------------|

SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

ST321-SF2SUF

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