

N45C-1XB1



2-port sector antenna, 2x 698–896 MHz, 45° HPBW, 1x RET, internal SBT

- Broadband, providing future-ready single antenna for application in 700 MHz and existing 850 MHz cellular operation
- Specifically designed to have physical dimensions similar to most existing cellular antennas

General Specifications

| | |
|--|--|
| Antenna Type | Sector |
| Band | Single band |
| Color | Light Gray (RAL 7035) |
| Grounding Type | RF connector body grounded to reflector and mounting bracket |
| Performance Note | Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| Radome Material | Fiberglass, UV resistant |
| Radiator Material | Aluminum Copper Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 2 |

Remote Electrical Tilt (RET) Information


| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 |
| Internal RET | Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

N45C-1XB1

| | |
|---|---------------------|
| Width | 457 mm 17.992 in |
| Depth | 178 mm 7.008 in |
| Length | 2437 mm 95.945 in |
| Net Weight, without mounting kit | 32 kg 70.548 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|-----------------------|
| R1 | 698-896 | 1-2 | 1 | ANxxxxxxxxxxxxxxxxxx1 |

Bottom

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

| | |
|---------------------------------|---------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 698 – 896 MHz |
| Polarization | ±45° |

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 |
|--|---------|---------|
| Gain, dBi | 18.2 | 18.5 |
| Beamwidth, Horizontal, degrees | 47 | 43 |
| Beamwidth, Vertical, degrees | 9 | 8.3 |
| Beam Tilt, degrees | 2–12 | 2–12 |
| USLS (First Lobe), dB | 14 | 14 |
| Front-to-Back Ratio at 180°, dB | 29 | 30 |
| CPR at Boresight, dB | 24 | 20 |
| CPR at 10 dB Horizontal Beamwidth, dB | 11 | 13 |

N45C-1XB1

| | | |
|--------------------------------------|------------|------------|
| Isolation, Cross Polarization, dB | 25 | 25 |
| VSWR Return loss, dB | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 |
| Input Power per Port, maximum, watts | 350 | 350 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–806 | 806–896 |
|---|--------------------------------------|--------------------------------------|
| Gain by all Beam Tilts, average, dBi | 17.9 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.2 |
| Gain by Beam Tilt, average, dBi | 0° 17.9 6° 18.0 12° 17.7 | 0° 18.6 6° 18.6 12° 18.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.9 | ±1.9 |
| Beamwidth, Vertical Tolerance, degrees | ±0.6 | ±0.3 |
| USLS, beampeak to 20° above beampeak, dB | 17 | 16 |
| Front-to-Back Total Power at 180° ± 30°, dB | 24 | 26 |
| CPR at Boresight, dB | 27 | 21 |
| CPR at 10 dB Horizontal Beamwidth, dB | 12 | 16 |

Mechanical Specifications

| | |
|--|---|
| Effective Projective Area (EPA), frontal | 1.4 m ² 15.069 ft ² |
| Effective Projective Area (EPA), lateral | 0.3 m ² 3.229 ft ² |
| Mechanical Tilt Range | 0°–11° |
| Wind Loading @ Velocity, frontal | 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 315.0 N @ 150 km/h (70.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|----------------------|
| Width, packed | 567 mm 22.323 in |
| Depth, packed | 311 mm 12.244 in |
| Length, packed | 2559 mm 100.748 in |
| Weight, gross | 51.7 kg 113.979 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|--------|----------------|
|--------|----------------|

N45C-1XB1

| | |
|---------------|--|
| CHINA-ROHS | Above maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |



Included Products

| | | |
|----------|---|--|
| BSAMNT-3 | - | Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set. |
| BSAMNT-M | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set. |

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

BSAMNT-3



Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

BSAMNT-3



BSAMNT-M



Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 4.5 kg | 9.921 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

