

SBNHH-1D45C



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 3x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Three internal RETs for independent tilt on all three bands
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

General Specifications

| | |
|---|--|
| Antenna Type | Sector |
| Band | Multiband |
| Color | Light Gray (RAL 7035) |
| Grounding Type | RF connector inner conductor and 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 Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 4 |
| RF Connector Quantity, mid band | 0 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 6 |

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 RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |

SBNHH-1D45C

Protocol 3GPP/AISG 2.0 (Multi-RET)

Dimensions

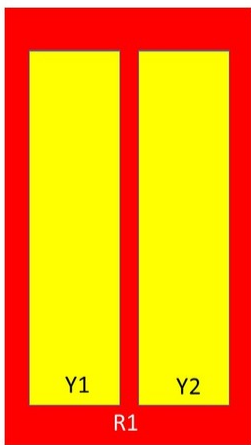
Width 457 mm | 17.992 in

Depth 178 mm | 7.008 in

Length 2437 mm | 95.945 in

Net Weight, without mounting kit 36.1 kg | 79.587 lb

Array Layout



| Array | Freq (MHz) | Conns | RET (MRET) | AISG RET UID |
|-------|------------|-------|------------|------------------------|
| R1 | 698-896 | 1-2 | 1 | ARxxxxxxxxxxxxxxxxxx.1 |
| Y1 | 1695-2360 | 3-4 | 2 | ARxxxxxxxxxxxxxxxxxx.2 |
| Y2 | 1695-2360 | 5-6 | 3 | ARxxxxxxxxxxxxxxxxxx.3 |

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

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 698 – 896 MHz

Polarization ±45°

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---------------------------------------|---------|---------|-----------|-----------|-----------|-----------|
| Gain, dBi | 18.3 | 18.6 | 19.6 | 20.2 | 20.5 | 21 |
| Beamwidth, Horizontal, degrees | 47 | 43 | 44 | 42.6 | 42 | 39 |
| Beamwidth, Vertical, degrees | 8.9 | 8.2 | 5.8 | 5.3 | 5.1 | 4.5 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–8 | 0–8 | 0–8 | 0–8 |
| USLS (First Lobe), dB | 17 | 16 | 20 | 20 | 19 | 16 |

SBNHH-1D45C

| | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| Front-to-Back Ratio at 180°, dB | 30 | 31 | 33 | 35 | 35 | 36 |
| CPR at Boresight, dB | 25 | 19 | 20 | 24 | 17 | 17 |
| CPR at 10 dB Horizontal Beamwidth, dB | 11 | 16 | 10 | 10 | 10 | 10 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 30 | 30 | 30 | 30 | 30 | 30 |
| VSWR Return loss, dB | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 350 | 350 | 350 | 350 | 350 | 300 |

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, maximum | 1,485.0 N @ 150 km/h (333.8 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 | 526 mm 20.709 in |
| Depth, packed | 283 mm 11.142 in |
| Length, packed | 2604 mm 102.52 in |
| Weight, gross | 50.1 kg 110.451 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



SBNHH-1D45C

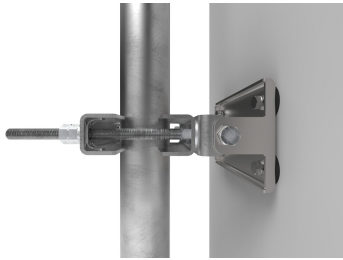
Included Products

- BSAMNT-3F – Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

BSAMNT-3F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

Product Classification

Product Type Fixed tilt 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 5.6 kg | 12.346 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 5.8 kg | 12.787 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.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

BSAMNT-3F

