

# SBNHH-1D45A



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

## OBSOLETE

This product was discontinued on: **March 30, 2024**

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information

<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (2)   Low band (1)

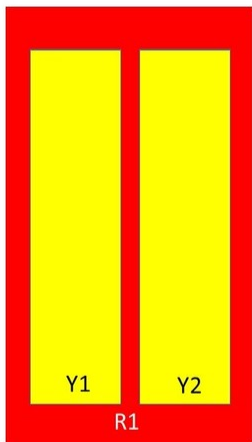
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<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Multi-RET)

## Dimensions

<b>Width</b>	457 mm   17.992 in
<b>Depth</b>	178 mm   7.008 in
<b>Length</b>	1220 mm   48.032 in
<b>Net Weight, without mounting kit</b>	22.9 kg   50.486 lb

## Array Layout



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

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

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   698 – 896 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
<b>Gain, dBi</b>	15.5	16.2	18.5	19.1	19.4	20
<b>Beamwidth, Horizontal, degrees</b>	48	43	44	43.2	44	39.2

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<b>Beamwidth, Vertical, degrees</b>	18.5	16.8	7.9	7.3	6.9	6
<b>Beam Tilt, degrees</b>	2–18	2–18	1–9	1–9	1–9	1–9
<b>USLS (First Lobe), dB</b>	16	17	16	16	15	13
<b>Front-to-Back Ratio at 180°, dB</b>	33	34	37	36	38	39
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port, maximum, watts</b>	350	350	350	350	350	300

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.64 m <sup>2</sup>   6.889 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.13 m <sup>2</sup>   1.399 ft <sup>2</sup>
<b>Mechanical Tilt Range</b>	0°–12°
<b>Wind Loading @ Velocity, frontal</b>	677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	526 mm   20.709 in
<b>Depth, packed</b>	283 mm   11.142 in
<b>Length, packed</b>	1387 mm   54.606 in
<b>Weight, gross</b>	32.3 kg   71.209 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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## Included Products

- BSAMNT-2F – 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