

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

This product will be discontinued on: March 30, 2024

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, 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)

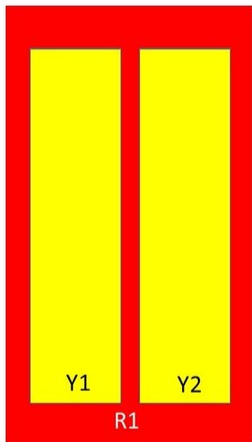
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Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1220 mm 48.032 in
Net Weight, without mounting kit	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 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	15.5	16.2	18.5	19.1	19.4	20
Beamwidth, Horizontal, degrees	48	43	44	43.2	44	39.2
Beamwidth, Vertical, degrees	18.5	16.8	7.9	7.3	6.9	6

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Beam Tilt, degrees	2–18	2–18	1–9	1–9	1–9	1–9
USLS (First Lobe), dB	16	17	16	16	15	13
Front-to-Back Ratio at 180°, dB	33	34	37	36	38	39
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
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

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	15.1	15.9	18.1	18.8	19.1	19.7
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.5	±0.4	±0.4	±0.3
Gain by Beam Tilt, average, dBi	2° 15.2 10° 15.1 18° 14.9	2° 16.0 10° 16.0 18° 15.5	1° 18.2 5° 18.2 9° 18.0	1° 18.9 5° 18.8 9° 18.6	1° 19.1 5° 19.1 9° 18.9	1° 19.8 5° 19.8 9° 19.4
Beamwidth, Horizontal Tolerance, degrees	±1.7	±3.1	±2.1	±1.4	±1.5	±1.6
Beamwidth, Vertical Tolerance, degrees	±1.1	±0.8	±0.3	±0.3	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	17	21	14	14	15	13
Front-to-Back Total Power at 180° ± 30°, dB	24	25	28	29	30	30
CPR at Boresight, dB	26	30	20	24	18	20
CPR at 10 dB Horizontal Beamwidth, dB	13	15	10	10	11	13

Mechanical Specifications

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

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Wind Loading @ Velocity, maximum	677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 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	1342 mm 52.835 in
Weight, gross	32.2 kg 70.989 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



Included Products

BSAMNT-2F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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