

SBNHH-1D85C



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 85° HPBW, 3x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Three internal RETs for independent tilt on all three bands

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.37 m ² 3.983 ft ²
Effective Projective Area (EPA), lateral	0.31 m ² 3.337 ft ²
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, General

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Dimensions

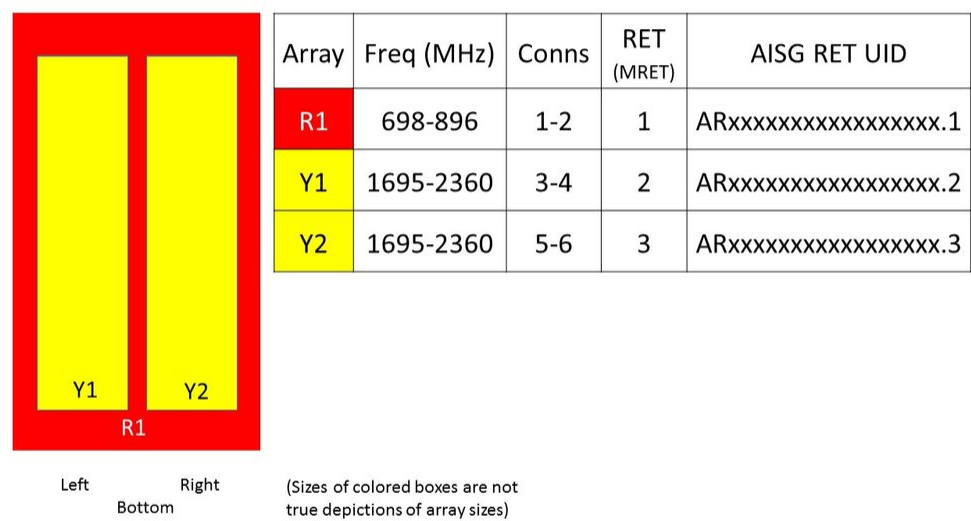
Width	301 mm 11.85 in
Length	2438 mm 95.984 in

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Depth

180 mm | 7.087 in

Array Layout



Electrical Specifications

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

Remote Electrical Tilt (RET) Information, Electrical

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

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Input Voltage

10–30 Vdc

Internal RET

High band (2) | Low band (1)

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	15.6	15.6	17	17.6	17.9	17.8
Beamwidth, Horizontal, degrees	81.5	83	81.5	79	79	79.7
Beamwidth, Vertical, degrees	8.9	8.1	5.6	5.2	5	4.6
Beam Tilt, degrees	0–10	0–10	0–8	0–8	0–8	0–8
USLS (First Lobe), dB	16	17	14	14	14	15
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	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 at 50° C, maximum, watts	300	300	300	300	300	250

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	15.4	15.4	16.6	17.3	17.6	17.6
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.3	±0.6	±0.2	±0.4	±0.3
Gain by Beam Tilt, average, dBi	0° 15.2 5° 15.5 10° 15.5	0° 15.1 5° 15.4 10° 15.5	0° 16.6 4° 16.6 8° 16.4	0° 17.3 4° 17.4 8° 17.2	0° 17.6 4° 17.7 8° 17.5	0° 17.5 4° 17.7 8° 17.3
Beamwidth, Horizontal Tolerance, degrees	±2.3	±1.4	±4.5	±2.4	±2.9	±2.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	17	18	15	16	16	17
Front-to-Back Total Power at 180° ± 30°, dB	22.5	24	27.4	25.6	25	27
CPR at Boresight, dB	20	20	21	22	18	24.8
CPR at Sector, dB	13.7	16	12.5	12	11	6.1

Mechanical Specifications

Wind Loading at Velocity, frontal

393.0 N @ 150 km/h | 89.0 lbf @ 150 km/h

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Wind Loading at Velocity, lateral	330.0 N @ 150 km/h 74.2 lbf @ 150 km/h
Wind Loading at Velocity, maximum	170.2 lbf @ 150 km/h 757.0 N @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	409 mm 16.102 in
Depth, packed	299 mm 11.772 in
Length, packed	2561 mm 100.827 in
Net Weight, without mounting kit	22.5 kg 49.604 lb
Weight, gross	35 kg 77.162 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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