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, 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
Protocol	3GPP/AISG 2.0 (Multi-RET)

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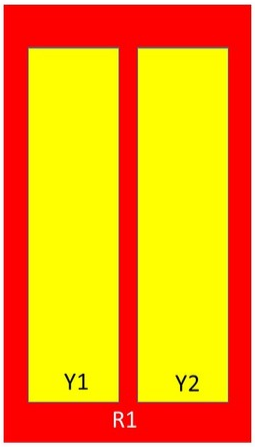
Dimensions

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



Left Right
Bottom

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

(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
Front-to-Back Ratio at 180°,	30	31	33	35	35	36

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dB						
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 m² | 15.069 ft²
Effective Projective Area (EPA), lateral	0.3 m² | 3.229 ft²
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

Included Products

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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

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