

# SBNHH-1D65C



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

## 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

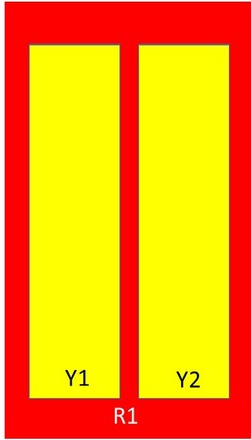
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (1)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Multi-RET)

## Dimensions

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<b>Width</b>	301 mm   11.85 in
<b>Depth</b>	180 mm   7.087 in
<b>Length</b>	2453 mm   96.575 in
<b>Net Weight, without mounting kit</b>	22.5 kg   49.604 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		

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>	16.2	16	17.7	17.9	18.5	18.5
<b>Beamwidth, Horizontal, degrees</b>	66.2	63.8	70	64.5	63	58
<b>Beamwidth, Vertical, degrees</b>	8.9	7.8	5.7	5.2	5	4.4
<b>Beam Tilt, degrees</b>	0–11	0–11	0–7	0–7	0–7	0–7
<b>USLS (First Lobe), dB</b>	11	12	15	15	15	14
<b>Front-to-Back Ratio at 180°, dB</b>	29	31	27	27	28	27
<b>Isolation, Cross Polarization,</b>	25	25	25	25	25	25

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dB

<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30
<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 at 50°C, maximum, watts</b>	300	300	300	300	300	250

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>806–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.8	15.6	17.3	17.8	18.2	18.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.5	±0.3	±0.2	±0.5	±0.4
<b>Gain by Beam Tilt, average, dBi</b>	0° 16.0 5° 16.0 11° 15.5	0° 15.8 5° 15.8 11° 15.2	0° 17.3 4° 17.4 7° 17.3	0° 17.7 4° 17.8 7° 17.7	0° 18.0 4° 18.2 7° 18.1	0° 17.9 4° 18.2 7° 18.2
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.2	±1.9	±3.4	±3.8	±4.7	±3.7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.5	±0.3	±0.2	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	13	14	17	16	17	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25.6	23.8	27	24.6	25	26
<b>CPR at Boresight, dB</b>	29	22	20	21	19	21
<b>CPR at Sector, dB</b>	14	11	13	11	9	5

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.37 m <sup>2</sup>   3.983 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.31 m <sup>2</sup>   3.337 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	333.0 N @ 150 km/h (74.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	762.0 N @ 150 km/h (171.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	401.0 N @ 150 km/h (90.1 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	390 mm   15.354 in
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<b>Depth, packed</b>	296 mm   11.654 in
<b>Length, packed</b>	2628 mm   103.465 in
<b>Weight, gross</b>	32.8 kg   72.312 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
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

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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