

# SBNHH-1D65B-SR



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

## OBSOLETE

This product was discontinued on: **March 31, 2022**

### Replaced By:

NHH-65B-R2B

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

## 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)

# SBNHH-1D65B-SR

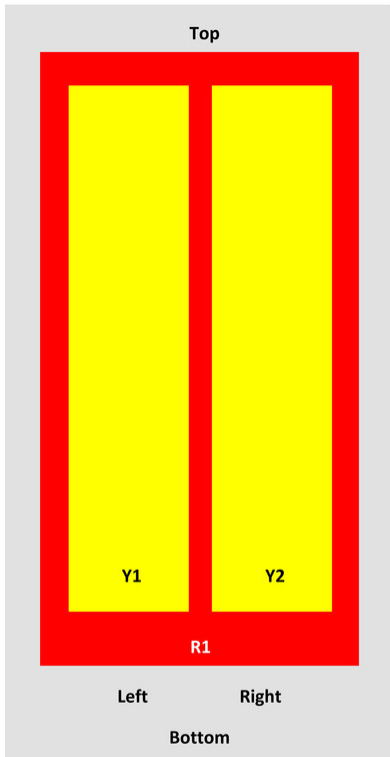
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	301 mm   11.85 in
<b>Depth</b>	181 mm   7.126 in
<b>Length</b>	1851 mm   72.874 in
<b>Net Weight, without mounting kit</b>	18.4 kg   40.565 lb

## Array Layout

SBNHH... SR



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-496	1-2	1	AXXXXXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	AXXXXXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna  
(Sizes of colored boxes are not true depictions of array sizes)

## Electrical Specifications

# SBNHH-1D65B-SR

<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>	14.9	14.7	17.7	18.2	18.6	18.6
<b>Beamwidth, Horizontal, degrees</b>	68	65.5	69	66.2	63	58
<b>Beamwidth, Vertical, degrees</b>	12.1	10.7	5.6	5.2	5	4.5
<b>Beam Tilt, degrees</b>	0–14	0–14	0–7	0–7	0–7	0–7
<b>USLS (First Lobe), dB</b>	14	13	15	15	15	13
<b>Front-to-Back Ratio at 180°, dB</b>	27	29	28	28	28	27
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<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, maximum, watts</b>	350	350	350	350	350	300

## Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
<b>Gain by all Beam Tilts, average, dBi</b>	14.5	14.3	17.4	17.9	18.2	18.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.8	±0.4	±0.3	±0.5	±0.3
<b>Gain by Beam Tilt, average, dBi</b>	0° 14.6 7° 14.6 14° 14.2	0° 14.5 7° 14.4 14° 13.6	0° 17.4 3° 17.5 7° 17.4	0° 17.8 3° 17.9 7° 17.9	0° 18.1 3° 18.3 7° 18.2	0° 18.2 3° 18.4 7° 18.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±2.2	±3.4	±2	±4.6	±5.7	±4.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±1	±0.3	±0.2	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	16	14	16	16	16	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24.5	25.6	27	26	26	25.6

# SBNHH-1D65B-SR

<b>CPR at Boresight, dB</b>	22	23	21	20	20	22
<b>CPR at Sector, dB</b>	13	11	16	12	11	4

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.22 m <sup>2</sup>   2.368 ft <sup>2</sup>   0.27 m <sup>2</sup>   2.906 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	283.0 N @ 150 km/h (63.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	234.0 N @ 150 km/h (52.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	545.0 N @ 150 km/h (122.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	287.0 N @ 150 km/h (64.5 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
<b>Depth, packed</b>	296 mm   11.654 in
<b>Length, packed</b>	2025 mm   79.724 in
<b>Weight, gross</b>	31 kg   68.343 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.
----------	---	--

## \* Footnotes

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