

# 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

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light gray
<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

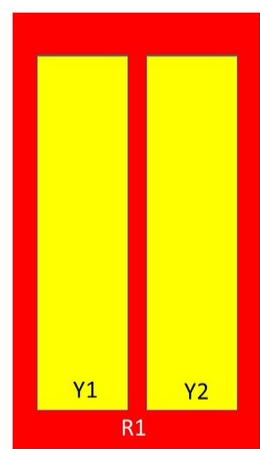
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (1)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol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

# SBNHH-1D65C

## Dimensions

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

## Array Layout



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

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

# SBNHH-1D65C

dB

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 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	15.8	15.6	17.3	17.8	18.2	18.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.3	±0.2	±0.5	±0.4
Gain by Beam Tilt, average, dBi	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
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.9	±3.4	±3.8	±4.7	±3.7
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	13	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	25.6	23.8	27	24.6	25	26
CPR at Boresight, dB	29	22	20	21	19	21
CPR at Sector, dB	14	11	13	11	9	5

## Mechanical Specifications

Effective Projective Area (EPA), frontal	0.37 m²   3.983 ft²
Effective Projective Area (EPA), lateral	0.31 m²   3.337 ft²
Wind Loading @ Velocity, frontal	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	333.0 N @ 150 km/h (74.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	762.0 N @ 150 km/h (171.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	401.0 N @ 150 km/h (90.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h   149.75 mph

## Packaging and Weights

# SBNHH-1D65C

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Width, packed	390 mm   15.354 in
Depth, packed	296 mm   11.654 in
Length, packed	2628 mm   103.465 in
Weight, gross	35.2 kg   77.603 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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