

SBNHH-1D45C-SR



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

OBSOLETE

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

Replaced By:

NHH-45C-R2B

6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

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
----------------------	-----------------------------------

SBNHH-1D45C-SR

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 (Single RET)

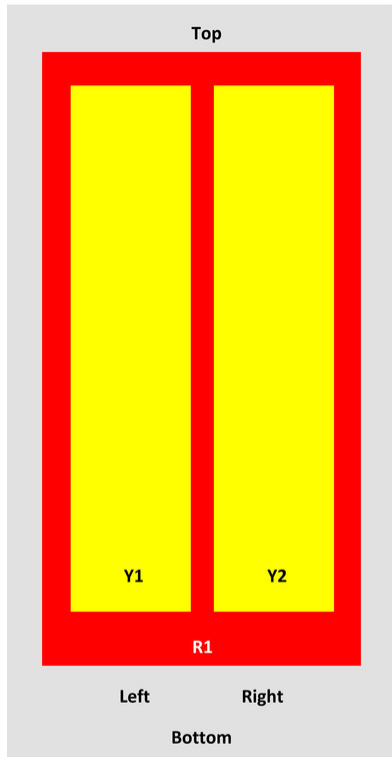
Dimensions

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

SBNHH-1D45C-SR

SBNHH... SR



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2360	5-6	3	ANXXXXXXXXXXXXX3

View from the front of the antenna
(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

SBNHH-1D45C-SR

USLS (First Lobe), dB	17	16	20	20	19	16
Front-to-Back Ratio at 180°, dB	30	31	33	35	35	36
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

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	17.9	18.5	19.2	20	20.3	20.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.2	±0.5	±0.4	±0.4	±0.4
Gain by Beam Tilt, average, dBi	0° 17.8 5° 18.0 10° 17.9	0° 18.4 5° 18.6 10° 18.4	0° 19.2 4° 19.3 8° 19.0	0° 20.0 4° 20.0 8° 19.8	0° 20.2 4° 20.3 8° 20.1	0° 20.8 4° 20.9 8° 20.5
Beamwidth, Horizontal Tolerance, degrees	±1.6	±2.3	±1.8	±0.9	±1	±1.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.3	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	16	16	16	16	17	16
Front-to-Back Total Power at 180° ± 30°, dB	24	25	29	31	32	33
CPR at Boresight, dB	25	22	22	26	21	19
CPR at 10 dB Horizontal Beamwidth, dB	14	18	13	11	11	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,460.0 N @ 150 km/h (328.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	325.0 N @ 150 km/h (73.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,534.0 N @ 150 km/h (344.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

SBNHH-1D45C-SR

Packaging and Weights

Width, packed	567 mm 22.323 in
Depth, packed	311 mm 12.244 in
Length, packed	2559 mm 100.748 in
Weight, gross	55.8 kg 123.018 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

- | | | |
|----------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| BSAMNT-M | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set. |

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
-------------------------	-----------------------------------------------------------------