

SBNH-1D65C-SR



4-port sector antenna, 2x 698-896 and 2x 1710-2360 MHz, 65° HPBW, 2x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package

OBSOLETE

This product was discontinued on: March 30, 2022

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
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	2
RF Connector Quantity, low band	2
RF Connector Quantity, total	4

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 (1) Low band (1)

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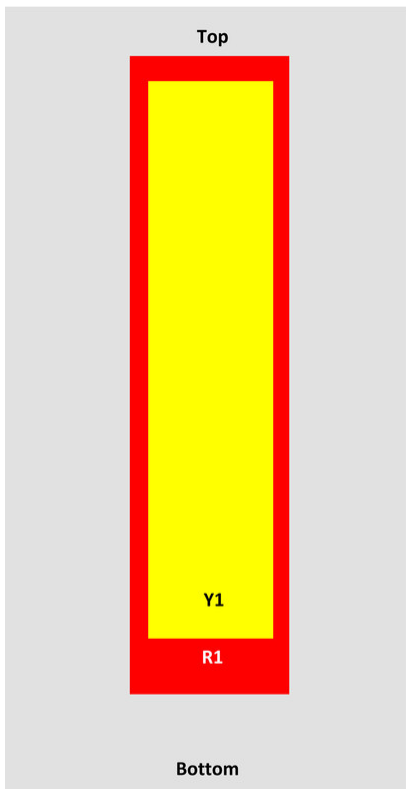
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	301 mm 11.85 in
Depth	181 mm 7.126 in
Length	2451 mm 96.496 in
Net Weight, without mounting kit	22.5 kg 49.604 lb

Array Layout

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Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXX1
Y1	1710-2360	3-4	2	ANXXXXXXXXXXXXX2

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

SBNH-1D65C-SR

Impedance	50 ohm
Operating Frequency Band	1710 – 2360 MHz 698 – 896 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	16.1	15.6	17.6	17.8	18.3	18.3
Beamwidth, Horizontal, degrees	66.2	64	70.8	64.6	63	58
Beamwidth, Vertical, degrees	8.8	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	13	12	16	15	17	18
Front-to-Back Ratio at 180°, dB	30	34	32	29	28	31
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	400	400	350	350	350	300

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	15.8	15.3	17.3	17.7	18	18.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.7	±0.4	±0.3	±0.5	±0.3
Gain by Beam Tilt, average, dBi	0° 15.7 5° 15.9 11° 15.6	0° 15.3 5° 15.4 11° 15.0	0° 17.3 4° 17.3 7° 17.2	0° 17.6 4° 17.8 7° 17.6	0° 17.9 4° 18.0 7° 18.0	0° 18.0 4° 18.2 7° 18.2
Beamwidth, Horizontal Tolerance, degrees	±1.2	±2.2	±3.7	±4.3	±3.2	±3.5
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.6	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	13	11	16	15	16	15
Front-to-Back Total Power at 180° ± 30°, dB	25	23	27	25	25	26

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CPR at Boresight, dB	30	25	18	19	18	22
CPR at Sector, dB	15	11	15	12	11	5

Mechanical Specifications

Wind Loading @ Velocity, frontal	395.0 N @ 150 km/h (88.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	332.0 N @ 150 km/h (74.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	761.0 N @ 150 km/h (171.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	400.0 N @ 150 km/h (89.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	409 mm 16.102 in
Depth, packed	299 mm 11.772 in
Length, packed	2572 mm 101.26 in
Weight, gross	35.2 kg 77.603 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



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

Performance Note Severe environmental conditions may degrade optimum performance