

SBJAH4-1D65C-DL



12-port sector antenna, 2x 698–798, 2x 824–896 and 8x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have duplexers

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Provides support for future Band 14 operations

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
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	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

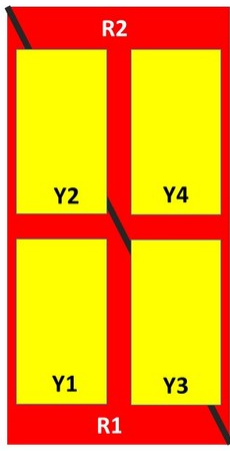
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (2) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

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Dimensions

Width	350 mm 13.78 in
Depth	208 mm 8.189 in
Length	2438 mm 95.984 in
Net Weight, without mounting kit	31.4 kg 69.225 lb

Array Layout



Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxxxxxx.1
R2	824-896	3-4		
Y1	1695-2360	5-6	2	ANxxxxxxxxxxxxxxxxxxx.2
Y3	1695-2360	9-10		
Y2	1695-2360	7-8	3	ANxxxxxxxxxxxxxxxxxxx.3
Y4	1695-2360	11-12		

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 – 798 MHz 824 – 896 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	698–798	824–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	15.9	16.4	16.9	17.2	17.6	17.6
Beamwidth, Horizontal, degrees	67	64	63	63	64	65
Beamwidth, Vertical, degrees	9.7	8.6	8.2	7.5	7	6.2
Beam Tilt, degrees	2–11	2–11	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	17	18	17	14
Front-to-Back Ratio at 180°,	32	34	31	36	36	36

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dB

Isolation, Cross Polarization, dB	28	28	28	28	28	28
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	698–798	824–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	15.7	16.2	16.4	16.8	17	17.5
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.6	±0.4	±0.6	±0.5
Gain by Beam Tilt, average, dBi	2° 15.6 6° 15.8 11° 15.7	2° 15.9 6° 16.2 11° 16.2	2° 16.3 6° 16.4 12° 16.3	2° 16.7 6° 16.9 12° 16.7	2° 16.7 6° 17.2 12° 17.0	2° 17.1 6° 17.6 12° 17.4
Beamwidth, Horizontal Tolerance, degrees	±1.1	±1.5	±3.5	±3	±4.5	±3.7
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.5	±0.4	±0.6	±0.2
USLS, beampeak to 20° above beampeak, dB	16	17	14	16	16	14
Front-to-Back Total Power at 180° ± 30°, dB	26	24	27	30	27	28
CPR at Boresight, dB	21	21	19	21	23	24
CPR at Sector, dB	10	12	10	14	13	8

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.4 m ² 4.306 ft ²
Effective Projective Area (EPA), lateral	0.34 m ² 3.66 ft ²
Wind Loading @ Velocity, frontal	425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

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Width, packed	450 mm 17.717 in
Depth, packed	355 mm 13.976 in
Length, packed	2585 mm 101.772 in
Weight, gross	46.2 kg 101.853 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
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
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