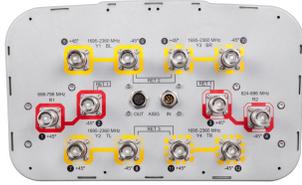


# SBJAH4-1D65B-DL



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

<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>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

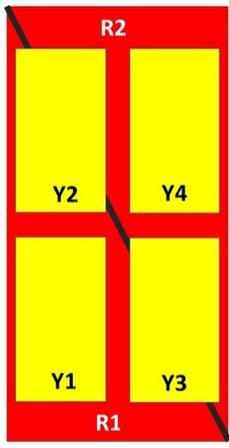
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (2)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol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

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## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, without mounting kit</b>	26.5 kg   58.422 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

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   698 – 798 MHz   824 – 896 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	698–798	824–896	1695–1880	1850–1990	1920–2180	2300–2360
<b>Gain, dBi</b>	15.2	15.5	15.4	16.1	16.2	16.7
<b>Beamwidth, Horizontal, degrees</b>	68	65	63	63	65	65
<b>Beamwidth, Vertical, degrees</b>	11.7	10.3	11.3	10.4	9.8	8.9
<b>Beam Tilt, degrees</b>	2–14	2–14	2–14	2–14	2–14	2–14
<b>USLS (First Lobe), dB</b>	15	16	17	18	18	17
<b>Front-to-Back Ratio at 180°,</b>	29	31	30	33	32	34

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dB

<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28
<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

<b>Frequency Band, MHz</b>	<b>698–798</b>	<b>824–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.9	15.3	15.3	15.8	15.9	16.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.3	±0.5	±0.4	±0.4	±0.4
<b>Gain by Beam Tilt, average, dBi</b>	2° 14.9 8° 15.0 14° 14.7	2° 15.2 8° 15.4 14° 15.2	2° 15.3 8° 15.4 14° 15.2	2° 15.8 8° 15.8 14° 15.7	2° 15.8 8° 15.9 14° 15.7	2° 16.4 8° 16.4 14° 16.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.7	±1.9	±3.4	±3	±4.0	±3.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.6	±0.7	±0.7	±0.6	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	16	17	18	18	17
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	23	25	27	25	27
<b>CPR at Boresight, dB</b>	18	20	18	20	21	23
<b>CPR at Sector, dB</b>	10	12	9	13	12	9

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.28 m <sup>2</sup>   3.014 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.24 m <sup>2</sup>   2.583 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	638.0 N @ 150 km/h (143.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h   149.75 mph

## Packaging and Weights

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<b>Width, packed</b>	450 mm   17.717 in
<b>Depth, packed</b>	355 mm   13.976 in
<b>Length, packed</b>	1975 mm   77.756 in
<b>Weight, gross</b>	40.1 kg   88.405 lb

## Regulatory Compliance/Certifications

### Agency

ISO 9001:2015



### Classification

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

### Performance Note

Severe environmental conditions may degrade optimum performance