

JAHH-45A-R3B



8-port sector antenna, 2x 698–798, 2x 824–894 and 4x 1695–2360 MHz, 45° HPBW, low bands each have a RET and the high bands share a RET. Two internal SBTs.

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector 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	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 5

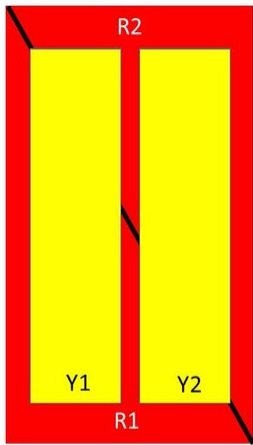
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Internal RET	High band (1) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1399 mm 55.079 in
Net Weight, without mounting kit	33.5 kg 73.855 lb

Array Layout



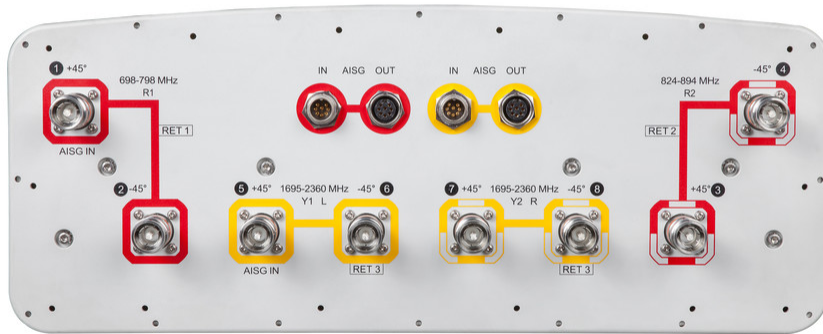
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxxxxxx3
Y2	1695-2360	7-8		

Left Right
Bottom

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 698 – 798 MHz 824 – 894 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698–798	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.8	15.6	18.1	18.7	19.1	19.6
Beamwidth, Horizontal, degrees	49	42	44	42.6	42	39.1
Beamwidth, Vertical, degrees	18.6	16.6	7.7	7.2	6.7	6
Beam Tilt, degrees	2–18	2–18	1–9	1–9	1–9	1–9
USLS (First Lobe), dB	17	19	18	19	19	20
Front-to-Back Ratio at 180°, dB	33	32	36	37	36	37
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
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

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	200	200	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	698–798	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.5	15.4	17.7	18.4	18.8	19.4
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.5	±0.4	±0.5	±0.3
Gain by Beam Tilt, average, dBi	2° 14.6 10° 14.5 18° 14.3	2° 15.6 10° 15.4 18° 15.1	1° 17.7 5° 17.8 9° 17.5	1° 18.5 5° 18.5 9° 18.2	1° 18.8 5° 18.9 9° 18.6	1° 19.5 5° 19.5 9° 19.2
Beamwidth, Horizontal Tolerance, degrees	±1.5	±2.7	±2.4	±1.5	±2.4	±1.3
Beamwidth, Vertical Tolerance, degrees	±1.2	±0.8	±0.3	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	17	22	14	14	15	15
Front-to-Back Total Power at 180° ± 30°, dB	24	23	29	31	32	32
CPR at Boresight, dB	22	24	17	21	20	19
CPR at Sector, dB	17	17	11	13	15	17

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.74 m ² 7.965 ft ²
Effective Projective Area (EPA), lateral	0.15 m ² 1.615 ft ²
Mechanical Tilt Range	0°–22°
Wind Loading @ Velocity, frontal	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	159.0 N @ 150 km/h (35.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	692.0 N @ 150 km/h (155.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	608 mm 23.937 in
Depth, packed	346 mm 13.622 in
Length, packed	1542 mm 60.709 in

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Weight, gross

46.5 kg | 102.515 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