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 TypeRF 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 MaterialAluminumRF Connector Interface4.3-10 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, active state, maximum 8 W Power Consumption, idle state, maximum 1 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

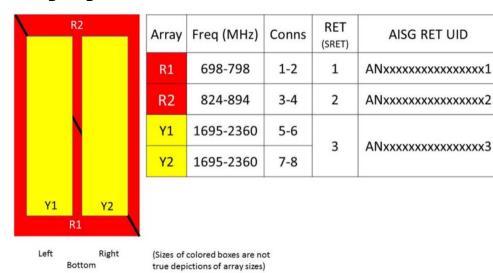
 Width
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

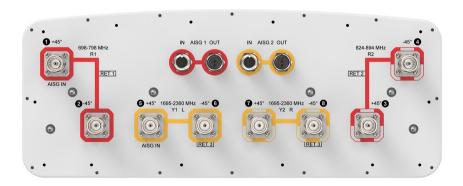
 Length
 1399 mm | 55.079 in

 Net Weight, antenna only
 33.5 kg | 73.855 lb

Array Layout



Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 698 – 798 MHz | 824 – 894 MHz

Polarization ±45°

Total Input Power, maximum $800~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$

Electrical Specifications

	R1	R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698-798	824-894	1695-1880	1850-1990	1920-2200	2300-2360
RF Port	1-2	3-4	5-8	5-8	5-8	5-8
Gain, dBi	14.8	15.6	18.1	18.7	19.1	19.6
Beamwidth, Horizontal, degrees	49	42	44	43	42	39
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



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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
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

Mechanical Specifications

Effective Projective Area (EPA), frontal $0.74 \text{ m}^2 \mid 7.965 \text{ ft}^2$ Effective Projective Area (EPA), lateral $0.15 \text{ m}^2 \mid 1.615 \text{ ft}^2$

 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
 526 mm | 20.709 in

 Depth, packed
 283 mm | 11.142 in

 Length, packed
 1566 mm | 61.654 in

 Weight, gross
 45.9 kg | 101.192 lb

Regulatory Compliance/Certifications

Agency Classification
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

