

# JAHH-33C-R3B



8-port sector antenna, 2x 698–798, 2x 824–894 and 4x 1695–2360 MHz, 33° HPBW, low bands each have a RET and high bands share a RET. Internal SBT for low band and internal SBT for high band.

- 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

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector 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>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 5
<b>Internal RET</b>	High band (1)   Low band (2)

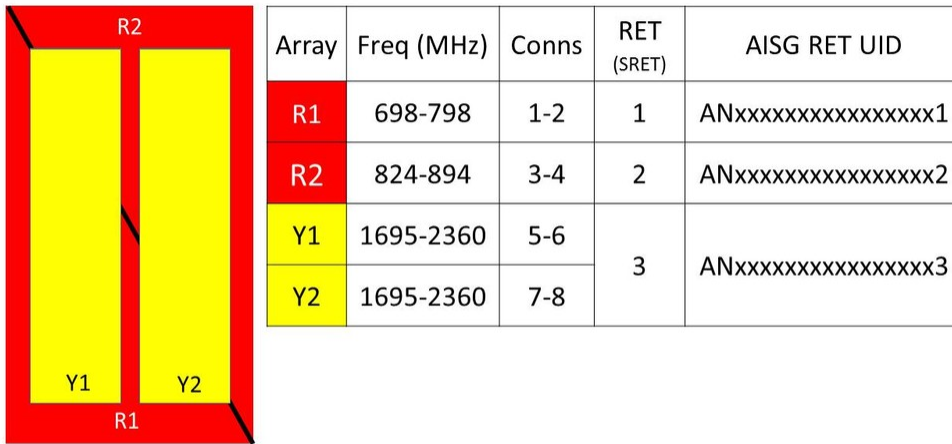
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<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, without mounting kit</b>	66 kg   145.505 lb

## Array Layout

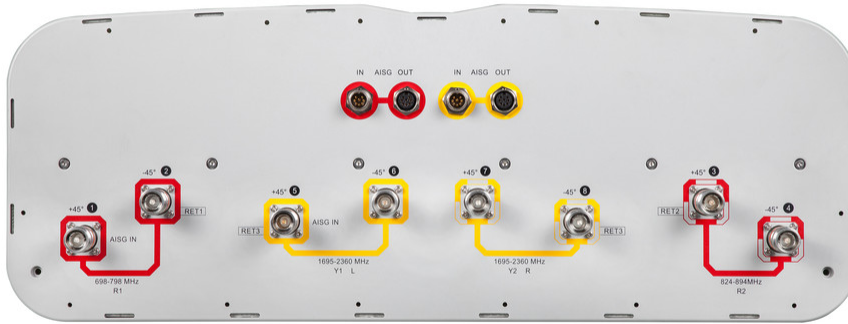


Left Right  
Bottom

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

## Port Configuration

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## Electrical Specifications

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

## Electrical Specifications

Frequency Band, MHz	698–798	824–894	1695–1880	1850–1990	1920–2200	2300–2360
<b>Gain, dBi</b>	18.3	19	19.8	20.2	20.6	21.4
<b>Beamwidth, Horizontal, degrees</b>	36	32	34	34	33	29
<b>Beamwidth, Vertical, degrees</b>	9.5	8.6	5.8	5.4	5	4.6
<b>Beam Tilt, degrees</b>	0–10	0–10	2–12	2–12	2–12	2–12
<b>Horizontal Sidelobe, dB</b>	21	20	20	18	18	19
<b>USLS (First Lobe), dB</b>	18	21	17	18	18	20
<b>Front-to-Back Ratio at 180°, dB</b>	32	39	35	37	38	36
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30

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<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 at 50°C, maximum, watts</b>	150	150	250	250	250	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–798</b>	<b>824–894</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	18	18.8	19.4	20	20.3	21.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.3	±0.6	±0.3	±0.5	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	0° 17.9 5° 18.1 10° 17.9	0° 18.7 5° 18.9 10° 18.8	2° 19.1 7° 19.5 12° 19.4	2° 19.7 7° 20.1 12° 20.0	2° 20.0 7° 20.4 12° 20.3	2° 20.8 7° 21.3 12° 21.8
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3	±0.9	±1.8	±1.3	±1.3	±1.1
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.3	±0.2	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	17	15	16	16	16
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	29	28	29	30	30	31
<b>CPR at Boresight, dB</b>	18	18	19	23	22	22
<b>CPR at Sector, dB</b>	9	15	12	14	12	12

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	954.0 N @ 150 km/h (214.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,434.0 N @ 150 km/h (322.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	382 mm   15.039 in
<b>Length, packed</b>	2590 mm   101.969 in
<b>Weight, gross</b>	92.7 kg   204.368 lb

## Regulatory Compliance/Certifications

# JAHH-33C-R3B

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## Agency

CHINA-ROHS

ISO 9001:2015

ROHS

UK-ROHS



## Classification

Above maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant/Exempted

Compliant/Exempted

## Included Products

- |           |   |  |
|-----------|---|--|
| BSAMNT-4  | - | 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. |
| BSAMNT-M4 | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.                            |

## \* Footnotes

### Performance Note

Severe environmental conditions may degrade optimum performance