

2HH-38A-R4-V2



8-port multibeam antenna, 8x 1695–2200 MHz, 4x 38° HPBW, 4x RET

- Enhances network capacity through six sectors site application with only three antenna faces
- Maximizes frequency spectrum utilization to increase Average Revenue Per User (ARPU)
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs
- High gain with excellent sector edge roll-off and azimuth sidelobe suppression
- Each antenna downtilt can be independently adjusted for greater flexibility in network optimization

General Specifications

Antenna Type	Multibeam
Band	Single band
Color	Light Gray (RAL 7035)
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	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, total	8

Remote Electrical Tilt (RET) Information

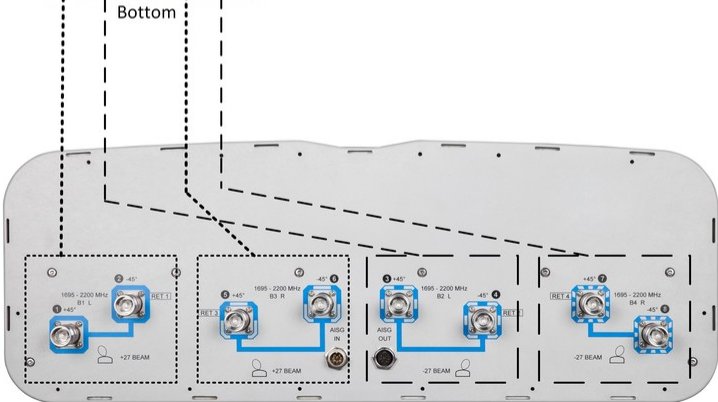
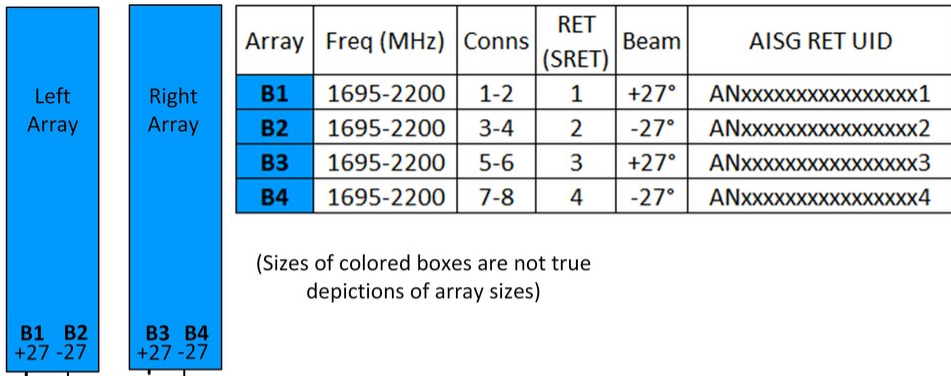
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

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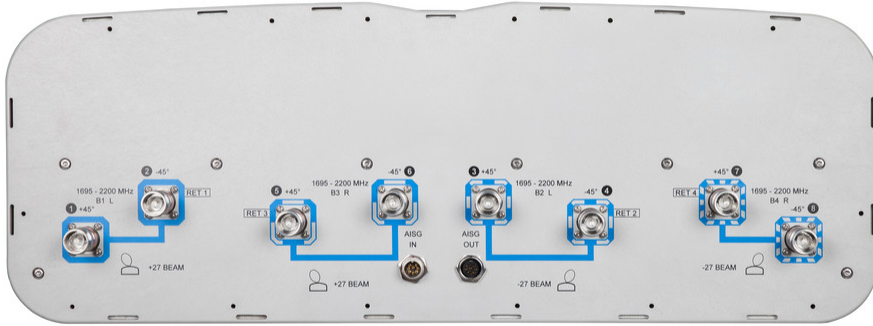
Width	640 mm 25.197 in
Depth	235 mm 9.252 in
Length	1224 mm 48.189 in
Net Weight, without mounting kit	29.7 kg 65.477 lb

Array Layout



Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2200
Gain, dBi	19.3	19.7	20
Beam Centers, Horizontal, degrees	±27	±27	±27
Beamwidth, Horizontal, degrees	38	35.8	34
Beamwidth, Vertical, degrees	7.7	7.3	6.8
Beam Tilt, degrees	2–10	2–10	2–10
Horizontal Sidelobe, dB	24	24	23
USLS (First Lobe), dB	24	24	24
Front-to-Back Ratio at 180°, dB	36	36	34
Isolation, Cross Polarization, dB	30	30	30
Isolation, Inter-band, dB	17	17	17
VSWR Return loss, dB	1.43 15.0	1.43 15.0	1.43 15.0

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1880	1850–1990	1920–2200
Gain by all Beam Tilts, average, dBi	18.9	19.4	19.6
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.7
Gain by Beam Tilt, average, dBi	2° 18.8 6° 19.0 10° 18.9	2° 19.3 6° 19.5 10° 19.4	2° 19.8 6° 19.7 10° 19.2
Beamwidth, Horizontal Tolerance, degrees	±1.6	±1.7	±3.2
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.6
USLS, beampeak to 20° above beampeak, dB	18	19	19
Front-to-Back Total Power at 180° ± 30°, dB	28	29	28
CPR at Boresight, dB	21	22	21
CPR at Sector, dB	11	13	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	505.0 N @ 150 km/h (113.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	156.0 N @ 150 km/h (35.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	520.0 N @ 150 km/h (116.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm 29.606 in
Depth, packed	387 mm 15.236 in
Length, packed	1379 mm 54.291 in
Weight, gross	44.1 kg 97.224 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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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