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
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, General

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male

Dimensions

Width	640 mm | 25.197 in
Length	1224 mm | 48.189 in
Depth	235 mm | 9.252 in

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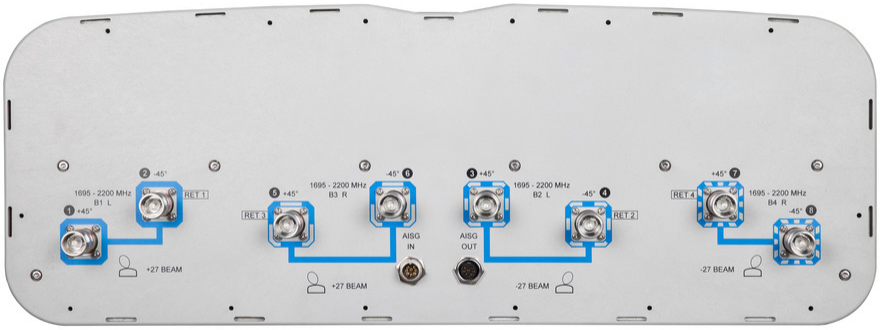
Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
B1	1695-2200	1-2	1	ANxxxxxxxxxxxxxxxx1
B2	1695-2200	3-4	2	ANxxxxxxxxxxxxxxxx2
B3	1695-2200	5-6	3	ANxxxxxxxxxxxxxxxx3
B4	1695-2200	7-8	4	ANxxxxxxxxxxxxxxxx4

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz

Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W
Input Voltage	10–30 Vdc
Internal RET	High band (4)

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
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 at Velocity, frontal	114.4 lbf @ 150 km/h | 505.0 N @ 150 km/h
Wind Loading at Velocity, lateral	156.0 N @ 150 km/h | 35.1 lbf @ 150 km/h
Wind Loading at Velocity, maximum	154.7 lbf @ 150 km/h | 688.0 N @ 150 km/h
Wind Loading at Velocity, rear	116.9 lbf @ 150 km/h | 520.0 N @ 150 km/h
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	797 mm | 31.378 in
Depth, packed	402 mm | 15.827 in
Length, packed	1375 mm | 54.134 in
Net Weight, without mounting kit	29.7 kg | 65.477 lb
Weight, gross	45.6 kg | 100.531 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

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