



8-port multibeam antenna, 8x 1695–2400 MHz, 4x 38° HPBW, 4x RET with retractable tilt rods

- 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
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

Electrical Specifications

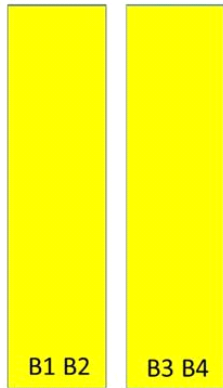
Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400
Gain, dBi	19.1	19.7	19.9	19.4
Beam Centers, Horizontal, degrees	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	38	36	33	29
Beamwidth, Vertical, degrees	7.4	7.0	6.6	5.9
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	20	19	17
Front-to-Back Ratio at 180°, dB	37	37	35	33
Isolation, Cross Polarization, dB	28	28	28	28
Isolation, Inter-band, dB	16	16	16	16
VSWR Return Loss, dB	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200	200
Polarization	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400
Gain by all Beam Tilts, average, dBi	18.7	19.4	19.5	18.9
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.6	±0.7
Gain by Beam Tilt, average, dBi	2 ° 18.7 7 ° 18.8 12 ° 18.6	2 ° 19.2 7 ° 19.4 12 ° 19.3	2 ° 19.5 7 ° 19.8 12 ° 19.1	2 ° 19.0 7 ° 19.0 12 ° 18.7
Beamwidth, Horizontal Tolerance, degrees	±2	±1.7	±3	±2.9
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	16	18	17	15
Front-to-Back Total Power at 180° ± 30°, dB	29	30	29	25
CPR at Boresight, dB	21	22	19	13
CPR at Sector, dB	12	13	11	5

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs](#).

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
B1	1695-2400	1-2	1	CPxxxxxxxxxxxxxxxxxB1
B2	1695-2400	3-4	2	CPxxxxxxxxxxxxxxxxxB2
B3	1695-2400	5-6	3	CPxxxxxxxxxxxxxxxxxB3
B4	1695-2400	7-8	4	CPxxxxxxxxxxxxxxxxxB4

Left

Bottom

Right

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

Port Configuration



General Specifications

Operating Frequency Band	1695 – 2400 MHz
Antenna Type	Multibeam
Band	Single band
Performance Note	Outdoor usage
Total Input Power, maximum	400 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	8
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	557.0 N @ 150 km/h 125.2 lbf @ 150 km/h
Wind Loading, lateral	175.0 N @ 150 km/h

2HH-33A-R4

Wind Loading, maximum	39.3 lbf @ 150 km/h 759.0 N @ 150 km/h 170.6 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1350.0 mm 53.1 in
Width	640.0 mm 25.2 in
Depth	235.0 mm 9.3 in
Net Weight, without mounting kit	30.8 kg 67.9 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male

Packed Dimensions

Length	1501.0 mm 59.1 in
Width	797.0 mm 31.4 in
Depth	402.0 mm 15.8 in
Shipping Weight	41.7 kg 91.9 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)



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