



4-port multibeam antenna, 4x 1710–2180 MHz, 2x 38° HPBW, RET compatible

- Enhances network capacity through six sectors site application with only three antenna faces
- Single panel design supporting two separate beams perfectly optimized at horizontal pointing angles of +27 degrees and –27 degrees from boresight
- 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

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	19.3	19.6	19.9
Beam Centers, Horizontal, degrees	±27	±27	±27
Beamwidth, Horizontal, degrees	38	36	34
Beamwidth, Vertical, degrees	7.6	7.1	6.7
Beam Tilt, degrees	0–10	0–10	0–10
Horizontal Sidelobe, dB	24	24	22
USLS (First Lobe), dB	23	23	23
Gain Roll-off at Boresight, dB	10	9	9
Gain Roll-off at Boresight Tolerance, dB	±0.7	±0.8	±0.9
Front-to-Back Ratio at 180°, dB	33	34	35
Isolation, Cross Polarization, port to port, dB	30	30	30
VSWR Return Loss, dB	1.43 15.0	1.43 15.0	1.43 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250
Polarization	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	18.9	19.4	19.6
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.6
Gain by Beam Tilt, average, dBi	0 ° 18.7 5 ° 19.0 10 ° 18.9	0 ° 19.1 5 ° 19.5 10 ° 19.4	0 ° 19.5 5 ° 19.7 10 ° 19.2
Beamwidth, Horizontal Tolerance, degrees	±1.5	±1.2	±2.1
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5
USLS, beampeak to 20° above beampeak, dB	17	18	18

HBXX-3817TB1-VTM | HBXX-3817TB1-A2M

Front-to-Back Total Power at 180° ± 30°, dB	29	30	28
CPR at Boresight, dB	24	24	18
CPR at Sector, dB	12	15	13

* 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](#).

General Specifications

Operating Frequency Band	1710 – 2180 MHz
Antenna Type	Multibeam
Band	Single band
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	4
RF Connector Quantity, high band	4
RF Connector Interface	7-16 DIN 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	202.0 N @ 150 km/h 45.4 lbf @ 150 km/h
Wind Loading, lateral	166.0 N @ 150 km/h 37.3 lbf @ 150 km/h
Wind Loading, maximum	388.0 N @ 150 km/h 87.2 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1390.0 mm 54.7 in
Width	301.0 mm 11.9 in
Depth	181.0 mm 7.1 in
Net Weight, without mounting kit	13.6 kg 30.0 lb

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator HBXX-3817TB1-A2M

Packed Dimensions

Length	1598.0 mm 62.9 in
Width	404.0 mm 15.9 in
Depth	310.0 mm 12.2 in
Shipping Weight	25.0 kg 55.1 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)
CE	Compliant with the relevant CE product directives



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