

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



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

This product will be discontinued on: March 30, 2024

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	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, total	4

Remote Electrical Tilt (RET) Information

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

Width	301 mm 11.85 in
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Depth	181 mm 7.126 in
Length	1390 mm 54.724 in
Net Weight, without mounting kit	13.6 kg 29.983 lb

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2180 MHz
Polarization	±45°

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	35.8	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

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

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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

Mechanical Specifications

Wind Loading @ Velocity, frontal	202.0 N @ 150 km/h (45.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	166.0 N @ 150 km/h (37.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	388.0 N @ 150 km/h (87.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	205.0 N @ 150 km/h (46.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	404 mm 15.906 in
Depth, packed	310 mm 12.205 in
Length, packed	1598 mm 62.913 in
Weight, gross	25 kg 55.115 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below 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
UK-ROHS	Compliant



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