

HBXXX-6516DS-VTM | HBXXX-6516DS-A3M

6-port sector antenna, 6x 1710–2180 MHz, 65° HPBW, RET compatible

- Excellent solution for site sharing and maximizing capacity
- Excellent front-to-back ratio, USLS, VSWR, and PIM specifications to enhance network quality
- Ideal solution for dense urban, suburban site applications
- Each antenna downtilt can be independently adjusted for greater flexibility in network optimization

General Specifications

Antenna Type	Sector
Band	Single band
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	6
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information, General

Model with Factory Installed AISG 2.0 Actuator	HBXXX-6516DS-A3M
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Dimensions

Width	500 mm 19.685 in
Length	1309 mm 51.535 in
Depth	90 mm 3.543 in

Electrical Specifications

Operating Frequency Band	1710 – 2180 MHz
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Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	17.9	17.7	17.8

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Beamwidth, Horizontal, degrees	64.1	63.4	62.3
Beamwidth, Vertical, degrees	7.8	7.4	7
Beam Tilt, degrees	2–10	2–10	2–10
USLS (First Lobe), dB	17	17	17
Front-to-Back Ratio at 180°, dB	32	35	35
CPR at Boresight, dB	23	26	24
CPR at Sector, dB	6.8	6.8	6
Isolation, Cross Polarization, dB	30	30	30
VSWR Return loss, dB	1.4 15.6	1.4 15.6	1.4 15.6
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	17.4	17.2	17.4
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.6
Gain by Beam Tilt, average, dBi	2° 17.4 6° 17.4 10° 17.2	2° 17.3 6° 17.3 10° 17.0	2° 17.6 6° 17.5 10° 17.1
Beamwidth, Horizontal Tolerance, degrees	±4	±3.7	±4.5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	10	18	19
Front-to-Back Total Power at 180° ± 30°, dB	29.5	30.7	30.7
CPR at Boresight, dB	27	28	26
CPR at Sector, dB	7	7	7

Material Specifications

Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant

Mechanical Specifications

Wind Loading at Velocity, frontal	180.5 lbf @ 150 km/h 802.0 N @ 150 km/h
Wind Loading at Velocity, lateral	111.0 N @ 150 km/h 25.0 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	663 mm 26.102 in
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Depth, packed	278 mm 10.945 in
Length, packed	1782 mm 70.158 in
Net Weight, without mounting kit	15.3 kg 33.731 lb
Weight, gross	18.6 kg 41.006 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



Included Products

600899A-2 — 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

600899A-2



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.

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Diameter, maximum	114.3 mm 4.5 in
Compatible Diameter, minimum	61 mm 2.402 in

Material Specifications

Material Type	Galvanized steel
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Packaging and Weights

Included	Brackets Hardware
Packaging quantity	1

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