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

OBSOLETE

This product was discontinued on: March 30, 2024

Replaced By:

6P-6M-A3 V3-65A-R3

6-port sector antenna, 6x 1695-2690 MHz, 65° HPBW, 3x RET

General Specifications

Antenna Type Sector

Band Single band

Color Light Gray (RAL 7035)

Grounding TypeRF connector inner conductor and body grounded to reflector and

mounting bracket

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Radiator Material Low loss circuit board

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

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

Dimensions

 Width
 500 mm | 19.685 in

 Depth
 90 mm | 3.543 in

COMMSCOPE®

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

 Length
 1309 mm | 51.535 in

 Net Weight, without mounting kit
 15.3 kg | 33.731 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	17.9	17.7	17.8
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	±4.0	±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

Page 2 of 5



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

Mechanical Specifications

Wind Loading @ Velocity, frontal 802.0 N @ 150 km/h (180.3 lbf @ 150 km/h)

Wind Loading @ Velocity, lateral 111.0 N @ 150 km/h (25.0 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 860.0 N @ 150 km/h (193.3 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 663 mm | 26.102 in

 Depth, packed
 278 mm | 10.945 in

 Length, packed
 1782 mm | 70.158 in

 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 UK-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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

Dimensions

Compatible Diameter, maximum114.3 mm | 4.5 inCompatible Diameter, minimum61 mm | 2.402 inWeight, net3.9 kg | 8.598 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 4.2 kg | 9.259 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





