

HBX-4517DS1-VTM | HBX-4517DS1-A1M



2-port sector antenna, 2x 1710–2180 MHz, 45° HPBW, RET compatible. Ideal for high gain corridor coverage or capacity optimization.

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	19.1	19.2	19.6
Beamwidth, Horizontal, degrees	45	45	43
Beamwidth, Vertical, degrees	6.5	6.1	5.8
Beam Tilt, degrees	0–10	0–10	0–10
USLS (First Lobe), dB	17	18	18
Front-to-Back Ratio at 180°, dB	32	32	31
Isolation, Cross Polarization, dB	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port, maximum, watts	300	300	300
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	18.9	19.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.7
Gain by Beam Tilt, average, dBi	0 ° 18.8 5 ° 19.0 10 ° 18.7	0 ° 18.7 5 ° 19.0 10 ° 18.8	0 ° 19.2 5 ° 19.4 10 ° 18.9
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.3	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.2	±0.4
USLS, beampeak to 20° above beampeak, dB	14	15	14
Front-to-Back Total Power at 180° ± 30°, dB	30	31	29
CPR at Boresight, dB	24	23	22
CPR at Sector, dB	14	14	14

* 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
B1	1710-2180	1-2

Bottom

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

General Specifications

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

Mechanical Specifications

RF Connector Quantity, total	2
RF Connector Quantity, high band	2
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	PVC, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1464.0 mm 57.6 in
Width	269.0 mm 10.6 in
Depth	132.0 mm 5.2 in

HBX-4517DS1-VTM | HBX-4517DS1-A1M

Net Weight, without mounting kit 12.3 kg | 27.1 lb

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator HBX-4517DS1-A1M

Packed Dimensions

Length	1776.0 mm 69.9 in
Width	376.0 mm 14.8 in
Depth	267.0 mm 10.5 in
Shipping Weight	20.6 kg 45.4 lb

Regulatory Compliance/Certifications

Agency

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

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives



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