

# 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

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

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	2
<b>RF Connector Quantity, high band</b>	2
<b>RF Connector Interface</b>	7-16 DIN Female
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Low loss circuit board
<b>Radome Material</b>	PVC, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	1464.0 mm   57.6 in
<b>Width</b>	269.0 mm   10.6 in
<b>Depth</b>	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

<b>Length</b>	1776.0 mm   69.9 in
<b>Width</b>	376.0 mm   14.8 in
<b>Depth</b>	267.0 mm   10.5 in
<b>Shipping Weight</b>	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



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

<b>Application</b>	Outdoor
<b>Includes</b>	Brackets   Hardware
<b>Package Quantity</b>	1

## Mechanical Specifications

<b>Color</b>	Silver
<b>Material Type</b>	Galvanized steel

## Dimensions

<b>Compatible Diameter, maximum</b>	114.3 mm   4.5 in
<b>Compatible Diameter, minimum</b>	61.0 mm   2.4 in
<b>Net Weight</b>	3.9 kg   8.5 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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

