

HBX-4519DS-A1M



2-port sector antenna, 2x 1710–2170 MHz, 45° HPBW, RET compatible

- Ideal for high gain corridor coverage or capacity optimization
- Rugged, reliable design with excellent passive intermodulation suppression

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	20.1	20.4	20.8
Beamwidth, Horizontal, degrees	46	47	44
Beamwidth, Vertical, degrees	4.9	4.7	4.5
Beam Tilt, degrees	0–5	0–5	0–5
USLS (First Lobe), dB	22	22	20
Front-to-Back Ratio at 180°, dB	33	35	35
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	350	350	350
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	19.9	20.1	20.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.4	±0.5
Gain by Beam Tilt, average, dBi	0 ° 19.9 3 ° 20.0 5 ° 19.7	0 ° 20.2 3 ° 20.3 5 ° 19.9	0 ° 20.6 3 ° 20.6 5 ° 20.3
Beamwidth, Horizontal Tolerance, degrees	±1.4	±0.9	±5.4
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.2	±0.3
USLS, beampeak to 20° above beampeak, dB	17	16	14
Front-to-Back Total Power at 180° ± 30°, dB	28	30	30
CPR at Boresight, dB	21	24	22
CPR at Sector, dB	14	16	12

* 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.](#)

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Array Layout

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	201 km/h 125 mph

Dimensions

Length	1938.0 mm 76.3 in
Width	269.0 mm 10.6 in
Depth	132.0 mm 5.2 in
Net Weight, without mounting kit	16.3 kg 35.9 lb

Packed Dimensions

Length	2251.0 mm 88.6 in
Width	376.0 mm 14.8 in
Depth	267.0 mm 10.5 in
Shipping Weight	27.4 kg 60.4 lb

Regulatory Compliance/Certifications

Agency	Classification
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)



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