

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

This product will be discontinued on: March 27, 2020

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 |

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* 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

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 Loading, frontal | 148.6 lbf @ 150 km/h 659.0 N @ 150 km/h |
| Wind Loading, lateral | 143.0 N @ 150 km/h 32.1 lbf @ 150 km/h |
| 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

HBX-4519DS-A1M

Agency

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

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
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



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 |
| Includes | Brackets Hardware |
| Package Quantity | 1 |

Mechanical Specifications

| | |
|----------------------|------------------|
| Color | Silver |
| Material Type | Galvanized steel |

Dimensions

| | |
|-------------------------------------|-------------------|
| Compatible Diameter, maximum | 114.3 mm 4.5 in |
| Compatible Diameter, minimum | 61.0 mm 2.4 in |
| Net Weight | 3.9 kg 8.5 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) |
| CE | Compliant with the relevant CE product directives |

