



2-port sector antenna, 2x 1710–2180 MHz, 33° HPBW, RET compatible

- Exceptional horizontal roll-off and front-to-back ratio for superior capacity efficiency
- Extended elevation tilt for maximum flexibility in urban core areas
- Rugged, reliable design with excellent passive intermodulation suppression

Electrical Specifications

| Frequency Band, MHz | 1710–1880 | 1850–1990 | 1920–2180 |
|--------------------------------------|------------|------------|------------|
| Gain, dBi | 20.5 | 20.7 | 21.0 |
| Beamwidth, Horizontal, degrees | 35 | 34 | 32 |
| Beamwidth, Vertical, degrees | 7.0 | 6.6 | 6.2 |
| Beam Tilt, degrees | 0–9 | 0–9 | 0–9 |
| USLS (First Lobe), dB | 18 | 18 | 18 |
| Front-to-Back Ratio at 180°, dB | 40 | 40 | 40 |
| CPR at Boresight, dB | 19 | 19 | 17 |
| 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 | 19.9 | 20.2 | 20.7 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.5 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 0 ° 20.0 5 ° 20.1 9 ° 19.6 | 0 ° 20.4 5 ° 20.4 9 ° 19.8 | 0 ° 20.9 5 ° 20.9 9 ° 20.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.4 | ±0.7 | ±2.6 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.4 | ±0.4 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 19 | 20 |
| Front-to-Back Total Power at 180° ± 30°, dB | 31 | 30 | 30 |
| CPR at Boresight, dB | 19 | 19 | 17 |

* 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 |
| RF Connector Location | Bottom |
| Wind Loading, frontal | 406.0 N @ 150 km/h 94.4 lbf @ 150 km/h |
| Wind Loading, lateral | 103.0 N @ 150 km/h 23.2 lbf @ 150 km/h |
| Wind Speed, maximum | 241 km/h 150 mph |

Dimensions

| | |
|---------------|---------------------|
| Length | 1463.0 mm 57.6 in |
|---------------|---------------------|

HBX-3319DS-VTM | HBX-3319DS-A1M

| | |
|---|--------------------|
| Width | 269.0 mm 10.6 in |
| Depth | 132.0 mm 5.2 in |
| Net Weight, without mounting kit | 12.7 kg 28.0 lb |

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator HBX-3319DS-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 | 22.2 kg 48.9 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