

HBX-6513DS-VTM



2-port sector antenna, 2x 1710–2180 MHz, 65° HPBW, RET compatible

- Rugged, reliable design with excellent passive intermodulation suppression

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	15.0	15.0	15.5
Beamwidth, Horizontal, degrees	68	66	64
Beamwidth, Vertical, degrees	15.0	14.1	13.5
Beam Tilt, degrees	0–18	0–18	0–18
USLS (First Lobe), dB	16	16	16
Front-to-Back Ratio at 180°, dB	28	30	28
CPR at Boresight, dB	20	19	19
CPR at Sector, dB	7	8	8
Isolation, Cross Polarization, dB	30	30	30
VSWR Return Loss, dB	1.4 15.6	1.4 15.6	1.4 15.6
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	14.3	14.4	14.6
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.7	±0.8
Gain by Beam Tilt, average, dBi	0 ° 14.7 9 ° 14.4 18 ° 13.5	0 ° 14.8 9 ° 14.6 18 ° 13.5	0 ° 15.2 9 ° 14.6 18 ° 13.7
Beamwidth, Horizontal Tolerance, degrees	±2.1	±1.4	±3.1
Beamwidth, Vertical Tolerance, degrees	±1.2	±0.7	±1
USLS, beampeak to 20° above beampeak, dB	17	17	18
Front-to-Back Total Power at 180° ± 30°, dB	24	24	23
CPR at Boresight, dB	20	18	18
CPR at Sector, dB	6	8	10

* 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
RF Connector Location	Bottom
Wind Loading, frontal	119.0 N @ 150 km/h 27.2 lbf @ 150 km/h
Wind Loading, lateral	33.0 N @ 150 km/h 7.4 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	695.0 mm 27.4 in
Width	166.0 mm 6.5 in
Depth	83.0 mm 3.3 in
Net Weight, without mounting kit	2.8 kg 6.2 lb

Packed Dimensions

Length	1000.0 mm 39.4 in
Width	277.0 mm 10.9 in
Depth	188.0 mm 7.4 in
Shipping Weight	8.8 kg 19.4 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

HBX-6513DS-VTM

China RoHS SJ/T 11364-2014
CE

Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives



Included Products

DB390 — Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Use for narrow panel antennas. Includes two pipe mounts.

DB5098 — Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance



Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Use for narrow panel antennas. Includes two pipe mounts.

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	2.0 kg 4.4 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)





Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

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	0.7 kg 1.4 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)

