



HWX-6516DS1-VTM

2-port sector antenna, 2x 1710–2690 MHz, 65° HPBW, RET compatible

- Provides a future-ready antenna solution with flexibility to reassign antenna, for example GSM 1800 service to 2.6GHz LTE at a later date
- Employs state-of-the-art ultra wideband technology providing excellent RF performance in all bands
- RF technology flexible—suitable for LTE, UMTS, CDMA, GSM, AWS, WiMAX, and other applications from 1.7–2.7 GHz
- Excellent RF pattern control over the full operating band and tilt range for desired coverage and interference containment

Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2170	2300–2500	2500–2690
Gain, dBi	17.3	17.4	18.2	18.4	18.7
Beamwidth, Horizontal, degrees	68	66	65	61	60
Beamwidth, Vertical, degrees	6.8	6.4	6.1	5.4	5.0
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	17	17	17	20	20
Front-to-Back Ratio at 180°, dB	30	30	30	32	29
CPR at Boresight, dB	17	19	20	21	17
CPR at Sector, dB	14	12	11	10	9
Isolation, dB	30	30	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	350	350	350	300	300
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	1710–1880	1850–1990	1920–2170	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	17.2	17.2	17.7	18.3	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.7	±0.2	±0.4
Gain by Beam Tilt, average, dBi	0° 17.1	0° 17.2	0° 17.7	0° 18.1	0° 18.6
Gain by Beam Tilt, average, dBi	5° 17.2	5° 17.3	5° 17.8	5° 18.4	5° 18.7
Gain by Beam Tilt, average, dBi	10° 16.9	10° 16.9	10° 17.4	10° 18.1	10° 18.1
Beamwidth, Horizontal Tolerance, degrees	±2.4	±2.3	±1.9	±2.2	±1.9
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.2	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	18	17	17	21	20
Front-to-Back Total Power at 180° ± 30°, dB	27	27	27	28	26
CPR at Boresight, dB	17	19	20	21	17
CPR at Sector, dB	14	12	11	10	9

* 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.](#)

General Specifications

Operating Frequency Band	1710 – 2690 MHz
Antenna Type	Sector
Band	Single band
Performance Note	Outdoor usage

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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	273.0 N @ 150 km/h 61.4 lbf @ 150 km/h
Wind Loading, lateral	111.0 N @ 150 km/h 25.0 lbf @ 150 km/h
Wind Loading, rear	350.0 N @ 150 km/h 78.7 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1390.0 mm 54.7 in
Width	170.0 mm 6.7 in
Depth	105.0 mm 4.1 in
Net Weight, without mounting kit	6.0 kg 13.2 lb

Packed Dimensions

Length	1696.0 mm 66.8 in
Width	270.0 mm 10.6 in
Depth	208.0 mm 8.2 in
Shipping Weight	14.6 kg 32.2 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
China RoHS SJ/T 11364-2006
ISO 9001:2008

Classification

Compliant by Exemption
Above Maximum Concentration Value (MCV)
Designed, manufactured and/or distributed under this quality management system



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.

DB5098E — Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

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* **Footnotes**

Performance Note	Severe environmental conditions may degrade optimum performance
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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.

General Specifications

Mount Type	Pipe mounts
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
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system





DB5098E

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	1.2 kg 2.6 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
China RoHS SJ/T 11364-2006
ISO 9001:2008

Classification

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