

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

OBSOLETE

This product was discontinued on: March 31, 2023

General Specifications

Antenna Type	Sector
Band	Single band
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	PVC, UV resistant
Radiator Material	Low loss circuit board
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	2
RF Connector Quantity, total	2

Dimensions

Width	170 mm 6.693 in
Depth	105 mm 4.134 in
Length	1390 mm 54.724 in
Net Weight, without mounting kit	6 kg 13.228 lb

Array Layout

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Array	Freq (MHz)	Conns
Y1	1710-2690	1-2

Bottom

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2690 MHz
Polarization	±45°

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	67.7	66	65	61.3	59.6
Beamwidth, Vertical, degrees	6.8	6.4	6.1	5.4	5
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, Cross Polarization, 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

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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 5° 17.2 10° 16.9	0° 17.2 5° 17.3 10° 16.9	0° 17.7 5° 17.8 10° 17.4	0° 18.1 5° 18.4 10° 18.1	0° 18.6 5° 18.7 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

Mechanical Specifications

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

Packaging and Weights

Width, packed	270 mm 10.63 in
Depth, packed	208 mm 8.189 in
Length, packed	1696 mm 66.772 in
Weight, gross	14.6 kg 32.187 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance

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ROHS Compliant

UK-ROHS Compliant



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

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance