

# HWX-6516DS1-VTM

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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

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>RF Connector Interface</b>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	2
<b>RF Connector Quantity, total</b>	2

## Dimensions

<b>Width</b>	170 mm   6.693 in
<b>Length</b>	1390 mm   54.724 in
<b>Depth</b>	105 mm   4.134 in

## 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

**Operating Frequency Band** 1710 – 2690 MHz

## Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2170	2300–2500	2500–2690
<b>Gain, dBi</b>	17.3	17.4	18.2	18.4	18.7
<b>Beamwidth, Horizontal, degrees</b>	67.7	66	65	61.3	59.6
<b>Beamwidth, Vertical, degrees</b>	6.8	6.4	6.1	5.4	5
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	17	17	17	20	20
<b>Front-to-Back Ratio at 180°, dB</b>	30	30	30	32	29

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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

## 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

## Material Specifications

Radiator Material	Low loss circuit board
Radome Material	PVC, UV resistant

## Mechanical Specifications

Wind Loading at Velocity, frontal	273.0 N @ 150 km/h   62.5 lbf @ 150 km/h
Wind Loading at Velocity, lateral	111.0 N @ 150 km/h   25.0 lbf @ 150 km/h
Wind Speed, maximum	241 km/h   149.75 mph

## Packaging and Weights

Width, packed	270 mm   10.63 in
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<b>Depth, packed</b>	208 mm   8.189 in
<b>Length, packed</b>	1696 mm   66.772 in
<b>Net Weight, without mounting kit</b>	6 kg   13.228 lb
<b>Weight, gross</b>	14.6 kg   32.187 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
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

# DB390

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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

<b>Application</b>	Outdoor
<b>Color</b>	Silver

## Dimensions

<b>Compatible Diameter, maximum</b>	114.3 mm   4.5 in
<b>Compatible Diameter, minimum</b>	61 mm   2.402 in

## Material Specifications

<b>Material Type</b>	Galvanized steel
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## Packaging and Weights

<b>Included</b>	Brackets   Hardware
<b>Packaging quantity</b>	1

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



# DB5098E

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

## General Specifications

**Application** Outdoor  
**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 114.3 mm | 4.5 in  
**Compatible Diameter, minimum** 61 mm | 2.402 in

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware  
**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

