# 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, mid band  | 0  |
| RF Connector Quantity, low band  | 0  |
| 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   |

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### Array Layout

| 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,<br>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°,<br>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,<br>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 |

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| <b>PIM, 3rd Order, 2 x 20 W, dBc</b> -150   | -150 | -150 | -150 | -150 |  |
|---|------|------|------|------|--|
| Input Power per Port, 350<br>maximum, watts | 350  | 350  | 300  | 300  |  |

#### 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          |
| 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

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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.

| Product Classification       |                     |
|------------------------------|---------------------|
| Product Type                 | Pipe mounting kit   |
| General Specifications       |                     |
| Application                  | Outdoor             |
| Color                        | Silver              |
| Dimensions                   |                     |
| Compatible Diameter, maximum | 114.3 mm   4.5 in   |
| Compatible Diameter, minimum | 61 mm   2.402 in    |
| Weight, net                  | 2 kg   4.409 lb     |
| Material Specifications      |                     |
| Material Type                | Galvanized steel    |
|                              |                     |
| Packaging and Weights        |                     |
| Included                     | Brackets   Hardware |

| Included           | Brackets   Haruware |
|--------------------|---------------------|
| Packaging quantity | 1                   |
| Weight, gross      | 2.1 kg   4.63 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          |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |



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# DB5098E



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

| Product Classification       |                       |
|------------------------------|-----------------------|
| Product Type                 | Downtilt mounting kit |
| General Specifications       |                       |
| Application                  | Outdoor               |
| Color                        | Silver                |
| Dimensions                   |                       |
| Compatible Diameter, maximum | 114.3 mm   4.5 in     |
| Compatible Diameter, minimum | 61 mm   2.402 in      |
| Weight, net                  | 1.2 kg   2.646 lb     |
| Material Specifications      |                       |
| Material Type                | Galvanized steel      |
|                              |                       |
| Packaging and Weights        |                       |
| Included                     | Brackets   Hardware   |

| included           | Diackets   Haluwale |
|--------------------|---------------------|
| Packaging quantity | 1                   |
| Weight, gross      | 1.4 kg   3.086 lb   |

### 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 www.commscope.com/ProductCompliance          |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |

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