

# HBX-9016DS-VTM | HBX-9016DS-A1M



2-port sector antenna, 2x 1710–2180 MHz, 90° HPBW, RET compatible

- Excellent gain, USLS, VSWR, and PIM specification to improve network quality
- Ideal solution to maximize coverage and capacity in suburban and rural areas
- Fully compatible with Andrew remote electrical tilt system for greater OpEx savings
- Wide horizontal and narrow vertical beamwidth to maximize coverage and capacity

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<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

## Remote Electrical Tilt (RET) Information

<b>Model with Factory Installed AISG 2.0 Actuator</b>	HBX-9016DS-A1M
---	----------------

## Dimensions

<b>Width</b>	172 mm   6.772 in
<b>Depth</b>	97 mm   3.819 in
<b>Length</b>	1897 mm   74.685 in
<b>Net Weight, without mounting kit</b>	7.6 kg   16.755 lb

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1710 – 2180 MHz
<b>Polarization</b>	±45°

# HBX-9016DS-VTM | HBX-9016DS-A1M

## Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain, dBi	17.7	17.7	18
Beamwidth, Horizontal, degrees	85.3	86.4	87
Beamwidth, Vertical, degrees	5.1	4.7	4.4
Beam Tilt, degrees	0–6	0–6	0–6
USLS (First Lobe), dB	18	18	18
Front-to-Back Ratio at 180°, dB	28	28	27
CPR at Boresight, dB	21	24	20
CPR at Sector, dB	14	13	11
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	-155	-155	-155
Input Power per Port, maximum, watts	350	350	350

## Electrical Specifications, BASTA

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	17.5	17.4	17.6
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.2	±0.4
Gain by Beam Tilt, average, dBi	0°   17.4 3°   17.6 6°   17.4	0°   17.4 3°   17.5 6°   17.3	0°   17.5 3°   17.7 6°   17.4
Beamwidth, Horizontal Tolerance, degrees	±1.4	±1.5	±1.5
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.2	±0.3
USLS, beampeak to 20° above beampeak, dB	18	18	19
Front-to-Back Total Power at 180° ± 30°, dB	23.5	22.5	21.3
CPR at Boresight, dB	24	25.5	23.2
CPR at Sector, dB	14	13	11

## Mechanical Specifications

Wind Loading @ Velocity, frontal	302.0 N @ 150 km/h (67.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	140.0 N @ 150 km/h (31.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	503.0 N @ 150 km/h (113.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

# HBX-9016DS-VTM | HBX-9016DS-A1M

---

<b>Width, packed</b>	283 mm   11.142 in
<b>Depth, packed</b>	200 mm   7.874 in
<b>Length, packed</b>	2206 mm   86.85 in
<b>Weight, gross</b>	16.6 kg   36.597 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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
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.
- 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