

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

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	Fiberglass, 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

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator	HBX-9016DS-A1M
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Dimensions

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

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2180 MHz
Polarization	±45°

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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

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Width, packed	283 mm 11.142 in
Depth, packed	200 mm 7.874 in
Length, packed	2206 mm 86.85 in
Weight, gross	16.6 kg 36.597 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



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

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

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



DB5098



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 0.7 kg | 1.543 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 0.8 kg | 1.764 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



