

Multiband Antenna, 790–960 and 1710–2180 MHz, 65° horizontal beamwidth, RET compatible

OBSOLETE

This product was discontinued on: December 31, 2016

Replaced By

SBNHH-1D85B 6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 85° HPBW, 3x RET

Electrical Specifications

Frequency Band, MHz	790-896	870-960	1710-1880	1850-1990	1920-2180
Gain, dBi	14.2	14.5	17.0	16.7	17.2
Beamwidth, Horizontal, degrees	87	87	84	86	86
Beamwidth, Vertical, degrees	11.1	10.5	5.1	4.8	4.4
Beam Tilt, degrees	0–10	0–10	0–6	0–6	0–6
USLS (First Lobe), dB	15	15	15	17	17
Front-to-Back Ratio at 180°, dB	21	24	28	28	28
CPR at Boresight, dB	21	18	22	21	21
CPR at Sector, dB	10	10	7	8	9
Isolation, Cross Polarization, dB	30	30	30	30	30
Isolation, Inter-band, dB	30	30	30	30	30
VSWR Return Loss, dB	1.4 15.6	1.4 15.6	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	400	400	300	300	300
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm				

Electrical Specifications, BASTA*

Frequency Band, MHz	790-896	870-960	1710-1880	1850-1990	1920-2180
Gain by all Beam Tilts, average, dBi	14.0	14.2	16.7	16.5	16.9
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.3	±0.2	±0.9
	0 ° 14.1	0 ° 14.3	0 ° 16.6	0 ° 16.4	0° 16.8
Gain by Beam Tilt, average, dBi	5 ° 14.0	5 ° 14.2	3 ° 16.8	3 ° 16.6	3 ° 17.0
	10 ° 13.8	10 ° 13.9	6° 16.7	6 ° 16.3	6 ° 16.7
Beamwidth, Horizontal Tolerance, degrees	±3.2	±2.3	±5	±3.3	±4

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DBXDH-8585B-VTM

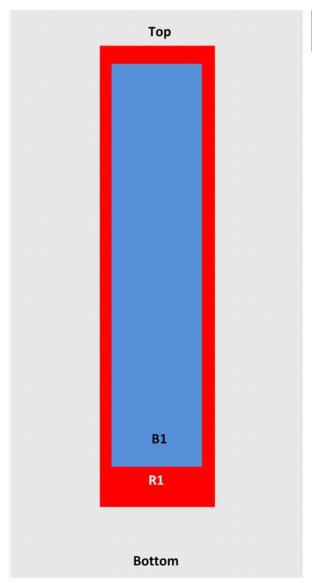
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.3	±0.2	±0.4
USLS, beampeak to 20° above beampeak, dB	18	18	18	19	19
Front-to-Back Total Power at 180° ± 30°, dB	17	19	22	23	23
CPR at Boresight, dB CPR at Sector, dB	24 10	20 11	23 7	21 9	22 10
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^{*} CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, <u>download the whitepaper Time to Raise the Bar on BSAs.</u>

Array Layout



DBXDH-8585A-VTM, DBXDH-8585A-A2M, DBXDH-8585B-VTM, DBXDH-8585B-A2M



Array	Freq (MHz)	Conns
R1	790-960	1-2
Bl	1710-2180	3-4

View from the front of the antenna

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

General Specifications

Operating Frequency Band

1710 – 2180 MHz | 790 – 960 MHz

COMMSCOPE®

DBXDH-8585B-VTM

Antenna Type Sector
Band Multiband
Performance Note Outdoor usage

Mechanical Specifications

RF Connector Quantity, total 4 RF Connector Quantity, low band 2 RF Connector Quantity, high band 2

RF Connector Interface 7-16 DIN Female
Color Light gray

Grounding Type RF connector inner conductor and body grounded to reflector and mounting bracket

Radiator Material Aluminum | Low loss circuit board

Radome Material Fiberglass, UV resistant

RF Connector Location Bottom

Wind Loading, maximum 619.0 N @ 150 km/h

139.2 lbf @ 150 km/h

Wind Speed, maximum 241 km/h | 150 mph

Dimensions

 Length
 1847.0 mm
 | 72.7 in

 Width
 301.0 mm
 | 11.9 in

 Depth
 181.0 mm
 | 7.1 in

 Net Weight, without mounting kit
 21.0 kg
 | 46.3 lb

Packed Dimensions

 Length
 2283.0 mm | 89.9 in

 Width
 463.0 mm | 18.2 in

 Depth
 358.0 mm | 14.1 in

 Shipping Weight
 34.4 kg | 75.8 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



Included Products

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DBXDH-8585B-VTM

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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