

CV65BSX-M | CV65BSX-2X2

4-port sector antenna, 2x 790–960 and 2x 1710–2690 MHz, 65° HPBW, RET compatible



- Utilizes AccuRET® actuator(s) on the back of the antenna

Electrical Specifications

Frequency Band, MHz	790–896	870–960	1710–1880	1850–1990	1920–2180	2300–2500	2500–2690
Gain, dBi	15.6	15.6	17.4	17.7	18.1	18.0	18.2
Beamwidth, Horizontal, degrees	63	62	71	66	67	57	58
Beamwidth, Vertical, degrees	10.5	9.7	5.6	5.3	5.0	4.3	4.1
Beam Tilt, degrees	0–10	0–10	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	14	16	15	16	16	15	16
Front-to-Back Ratio at 180°, dB	29	29	28	25	23	29	30
CPR at Boresight, dB	23	22	20	20	20	16	18
CPR at Sector, dB	10	10	9	7	7	5	7
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	30	30	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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	350	350	350	350	350	300	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	790–896	870–960	1710–1880	1850–1990	1920–2180	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	15.3	15.4	17.2	17.5	17.6	17.7	18.0
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.3	±0.3	±0.5	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0° 15.4 5° 15.4 10° 15.1	0° 15.4 5° 15.5 10° 15.1	2° 17.1 7° 17.3 12° 17.2	2° 17.4 7° 17.6 12° 17.4	2° 17.5 7° 17.7 12° 17.6	2° 17.6 7° 17.9 12° 17.5	2° 17.8 7° 18.1 12° 17.7
Beamwidth, Horizontal Tolerance, degrees	±2.7	±1.9	±4.6	±2.4	±2.4	±3.5	±4.5
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.6	±0.3	±0.3	±0.3	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	16	16	16	17	17	16	18
Front-to-Back Total Power at 180° ± 30°, dB	25	25	26	24	22	22	24
CPR at Boresight, dB	25	25	20	21	20	16	18
CPR at Sector, dB	11	11	12	9	9	5	7

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

Array Layout



Array	Freq (MHz)	Conns
R1	790-960	1-2
Y1	1710-2690	3-4

Bottom

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

General Specifications

Operating Frequency Band	1710 – 2690 MHz 790 – 960 MHz
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
Radome Material	Fiberglass, UV resistant
RF Connector Location	Bottom
Wind Loading, frontal	306.0 N @ 150 km/h 68.8 lbf @ 150 km/h
Wind Loading, lateral	253.0 N @ 150 km/h 56.9 lbf @ 150 km/h
Wind Loading, maximum	589.0 N @ 150 km/h 132.4 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1974.0 mm 77.7 in
Width	301.0 mm 11.9 in
Depth	181.0 mm 7.1 in
Net Weight, without mounting kit	17.9 kg 39.5 lb

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator CV65BSX-2X2

Packed Dimensions

Length	2108.0 mm 83.0 in
Width	441.0 mm 17.4 in
Depth	337.0 mm 13.3 in
Shipping Weight	34.6 kg 76.3 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014
CE

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives



Included Products

BSAMNT-OFFSET — Forward Offset Pipe Mounting Kit for 4.5 in (114.3 mm) OD round members

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance