

# 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

<b>Operating Frequency Band</b>	1710 – 2690 MHz   790 – 960 MHz
<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Performance Note</b>	Outdoor usage

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, high band</b>	2
<b>RF Connector Interface</b>	7-16 DIN Female
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Aluminum
<b>Radome Material</b>	Fiberglass, UV resistant
<b>RF Connector Location</b>	Bottom
<b>Wind Loading, frontal</b>	306.0 N @ 150 km/h 68.8 lbf @ 150 km/h
<b>Wind Loading, lateral</b>	253.0 N @ 150 km/h 56.9 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	589.0 N @ 150 km/h 132.4 lbf @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

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

## Remote Electrical Tilt (RET) Information

**Model with Factory Installed AISG 2.0 Actuator** CV65BSX-2X2

## Packed Dimensions

<b>Length</b>	2108.0 mm   83.0 in
<b>Width</b>	441.0 mm   17.4 in
<b>Depth</b>	337.0 mm   13.3 in
<b>Shipping Weight</b>	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

# BSAMNT-OFFSET

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Forward Offset Pipe Mounting Kit for 4.5 in (114.3 mm) OD round members

## General Specifications

<b>Application</b>	Outdoor
<b>Includes</b>	Brackets   Hardware
<b>Package Quantity</b>	1

## Mechanical Specifications

<b>Color</b>	Silver
<b>Material Type</b>	Galvanized steel

## Dimensions

<b>Compatible Diameter, maximum</b>	115.0 mm   4.5 in
<b>Compatible Diameter, minimum</b>	60.0 mm   2.4 in
<b>Net Weight</b>	3.5 kg   7.7 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)
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