

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

OBSOLETE

This product was discontinued on: March 31, 2023

Replaced By:

4P-2L2M-B2

4-port sector antenna, 2x 694–960 and 2x 1695–2690 MHz, 65° HPBW, 2x RET

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	2
RF Connector Quantity, low band	2
RF Connector Quantity, total	4

Remote Electrical Tilt (RET) Information

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

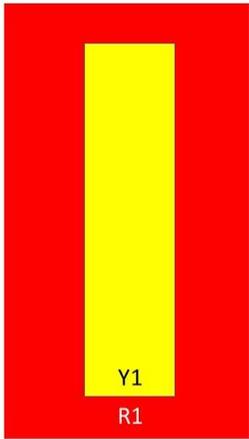
Width	301 mm 11.85 in
Depth	181 mm 7.126 in
Length	1974 mm 77.717 in

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Net Weight, without mounting kit

17.9 kg | 39.463 lb

Array Layout



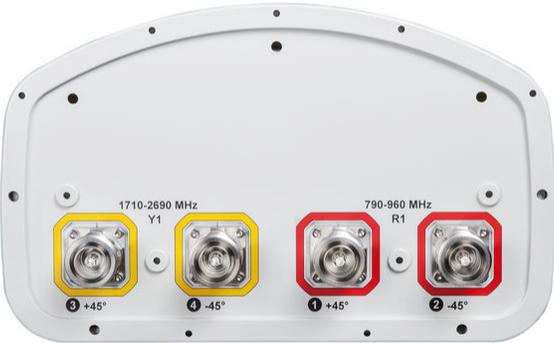
Array	Freq (MHz)	Conns
R1	790-960	1-2
Y1	1710-2690	3-4

Bottom

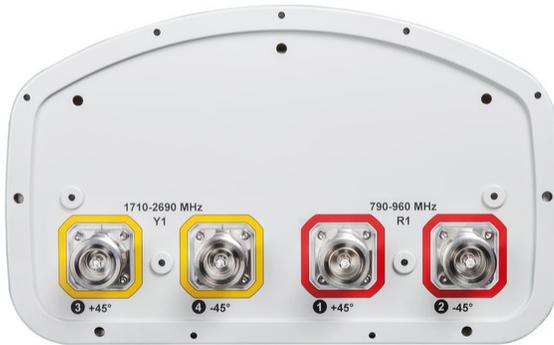
(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2690 MHz 790 – 960 MHz
Polarization	±45°

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	18.2
Beamwidth, Horizontal, degrees	63	62	71	66	67	57	58
Beamwidth, Vertical, degrees	10.5	9.7	5.6	5.3	5	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	5.3	7
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30	30

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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

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
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

Mechanical Specifications

Wind Loading @ Velocity, frontal	306.0 N @ 150 km/h (68.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	253.0 N @ 150 km/h (56.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	589.0 N @ 150 km/h (132.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	310.0 N @ 150 km/h (69.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	441 mm 17.362 in
Depth, packed	337 mm 13.268 in
Length, packed	2108 mm 82.992 in
Weight, gross	34.6 kg 76.28 lb

Regulatory Compliance/Certifications

CV65BSX-M | CV65BSX-2X2

Agency

Classification

CE	Compliant with the relevant CE product directives
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

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

Performance Note	Severe environmental conditions may degrade optimum performance
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