

# ZZVV-65A-R4N43

8-port sector antenna, 4x 1427-2690, and 4x 1695-2690 MHz 65° HPBW, 4 x RET



- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	8
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

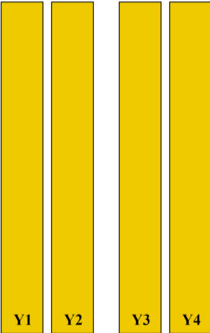
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Mid band (4)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1546 mm   60.866 in
<b>Net Weight, antenna only</b>	26.3 kg   57.982 lb

## Array Layout

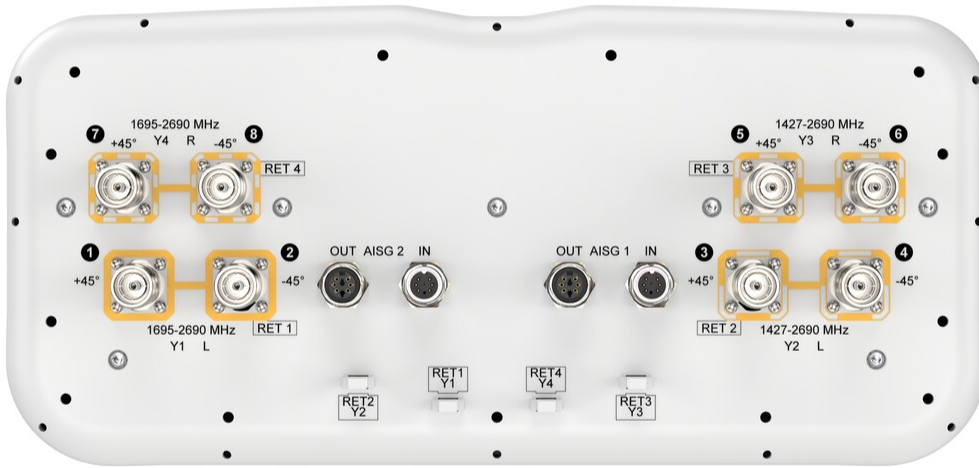


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2690	1 - 2	1	AISG1	CPXXXXXXXXXXXXXXXXY1
Y2	1427-2690	3 - 4	2	AISG1	CPXXXXXXXXXXXXXXXXY2
Y3	1427-2690	5 - 6	3	AISG1	CPXXXXXXXXXXXXXXXXY3
Y4	1695-2690	7 - 8	4	AISG1	CPXXXXXXXXXXXXXXXXY4

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	800 W @ 50 °C

## Electrical Specifications

	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
<b>Frequency Band, MHz</b>	<b>1427–1518</b>	<b>1695–1990</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6
<b>Gain at Mid Tilt, dBi</b>	15.5	16.8	17.3	18.1	18.6
<b>Beamwidth, Horizontal,</b>	73	73	74	69	62

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degrees

<b>Beamwidth, Vertical, degrees</b>	7.9	6.6	5.9	5.1	4.8
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	18	18	17	19	18
<b>Front-to-Back Ratio at 180°, dB</b>	35	35	34	31	31
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25	26	27	26	25
<b>Isolation, Cross Polarization, dB</b>	26	26	26	26	26
<b>Isolation, Inter-band, dB</b>	26	26	26	26	26
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200

## Electrical Specifications, BASTA

	<b>1427-1518</b>	<b>1695-1990</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>Frequency Band, MHz</b>					
<b>Gain by all Beam Tilts, average, dBi</b>	15.4	16.7	17.2	18	18.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.7	±0.7	±0.7	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3	±8	±5	±4	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.5	±0.7	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	13	16	17	18	18
<b>CPR at Boresight, dB</b>	17	21	18	16	17
<b>CPR at Sector, dB</b>	9	7	7	6	4

## Electrical Specifications

	<b>Y1,Y4</b>	<b>Y1,Y4</b>	<b>Y1,Y4</b>	<b>Y1,Y4</b>
<b>Frequency Band, MHz</b>	<b>1695-1990</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>RF Port</b>	1,2,7,8	1,2,7,8	1,2,7,8	1,2,7,8
<b>Gain at Mid Tilt, dBi</b>	16.7	17.6	18	18.4
<b>Beamwidth, Horizontal, degrees</b>	72	67	67	62
<b>Beamwidth, Vertical, degrees</b>	6.2	5.5	4.9	4.7

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<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	18	18	19	19
<b>Front-to-Back Ratio at 180°, dB</b>	32	33	32	32
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	27	25	25
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27
<b>Isolation, Inter-band, dB</b>	26	27	27	27
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1695-1990</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16.7	17.5	17.9	18.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.7	±0.4	±0.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5	±7	±4	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.5	±0.2	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	14	15	17	16
<b>CPR at Boresight, dB</b>	21	22	24	24
<b>CPR at Sector, dB</b>	12	9	8	8

## Packaging and Weights

<b>Width, packed</b>	530 mm   20.866 in
<b>Depth, packed</b>	349 mm   13.74 in
<b>Length, packed</b>	1718 mm   67.638 in
<b>Weight, gross</b>	38.2 kg   84.216 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value

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ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## Included Products

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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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