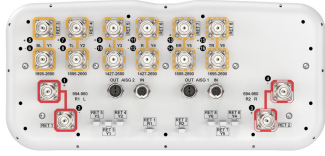


# RRZZV4-65D-R8N43



16-port sector antenna, 4x 694-960, 4x 1427-2690, and 8x 1695-2690 MHz 65° HPBW, 8 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>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	12
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	16

## 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>	Low band (2)   Mid band (6)
<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

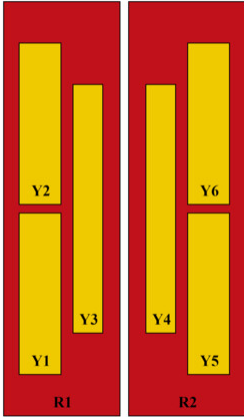
<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2769 mm   109.016 in

# RRZZV4-65D-R8N43

Net Weight, antenna only

44.6 kg | 98.326 lb

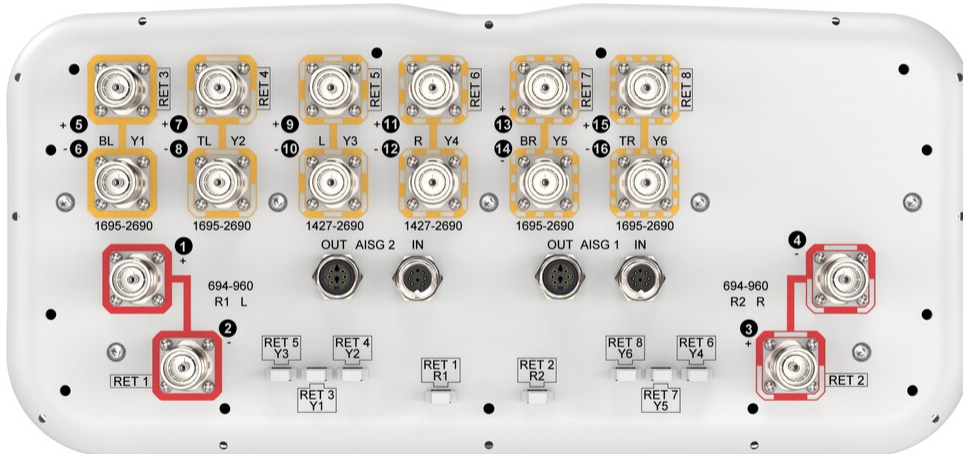
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	CPxxxxxxxxxxxxY3
Y4	1427-2690	11 - 12	6	CPxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	CPxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	CPxxxxxxxxxxxxY6

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

## Port Configuration



## Electrical Specifications

# RRZZV4-65D-R8N43

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,200 W @ 50 °C

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>Y3,Y4</b>	<b>Y3,Y4</b>	<b>Y3,Y4</b>	<b>Y3,Y4</b>	<b>Y3,Y4</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1427–1518</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	9-12	9-12	9-12	9-12	9-12
<b>Gain at Mid Tilt, dBi</b>	15.5	16.1	16.4	15.4	16.2	17.3	18.2	18.3
<b>Beamwidth, Horizontal, degrees</b>	61	55	53	64	68	68	61	58
<b>Beamwidth, Vertical, degrees</b>	7.7	6.9	6.4	6.9	5.7	5.1	4.5	4.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	15	15	16	17	16	17	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	35	35	32	32	32	32	32	33
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	23	23	24	26	26	27	27
<b>Isolation, Cross Polarization, dB</b>	27	27	27	26	26	26	26	26
<b>Isolation, Inter-band, dB</b>	27	27	27	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	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	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	250	200	200

## Electrical Specifications, BASTA

	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1427–1518</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1427–1518</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.4	16	16.3	15.4	16.1	17.1	18	18.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.3	±0.4	±0.7	±0.8	±0.9	±0.6	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6	±5	±4	±11	±8	±9	±5	±4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.3	±0.3	±0.4	±0.4	±0.2	±0.2
<b>USLS, beampeak to 20° above</b>	15	15	16	16	16	16	17	18

# RRZZV4-65D-R8N43

## beampeak, dB

CPR at Boresight, dB	24	22	21	18	17	17	18	15
CPR at Sector, dB	10	7	8	7	5	4	6	2

## Electrical Specifications

	Y1,Y2,Y5,Y6 Y1,Y2,Y5,Y6 Y1,Y2,Y5,Y6 Y1,Y2,Y5,Y6			
Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	5-8,13-16	5-8,13-16	5-8,13-16	5-8,13-16
Gain at Mid Tilt, dBi	16.1	17.2	17.9	17.7
Beamwidth, Horizontal, degrees	69	64	62	61
Beamwidth, Vertical, degrees	6.4	5.6	5	4.8
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	15	16	17
Front-to-Back Ratio at 180°, dB	32	31	32	33
Front-to-Back Total Power at 180° ± 30°, dB	26	25	26	26
Isolation, Cross Polarization, dB	27	27	27	27
Isolation, Inter-band, dB	27	27	27	27
VSWR   Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	16	17.1	17.8	17.6
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.9	±0.4	±0.6
Beamwidth, Horizontal Tolerance, degrees	±9	±9	±5	±6
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	15	15	16	16
CPR at Boresight, dB	18	17	18	17

# RRZZV4-65D-R8N43

CPR at Sector, dB                      7                      6                      9                      4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	511 mm   20.118 in
<b>Depth, packed</b>	318 mm   12.52 in
<b>Length, packed</b>	2890 mm   113.78 in
<b>Weight, gross</b>	64.3 kg   141.757 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

- |           |   |  |
|-----------|---|--|
| BSAMNT-4  | - | 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. |
| BSAMNT-M4 | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.                            |

## \* Footnotes

**Performance Note**                      Severe environmental conditions may degrade optimum performance