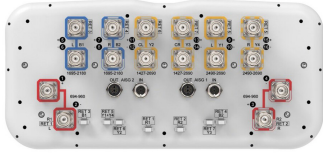


# RRZZHHTT-65B-R7N43



16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695-2180 and 4x 2490-2690 MHz, 65° HPBW, 7x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and High band
- 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 (5)
<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)

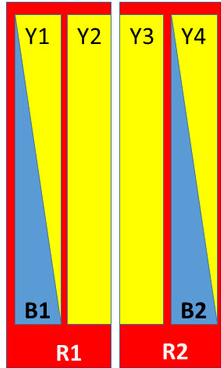
## Dimensions

<b>Width</b>	430 mm   16.929 in
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# RRZZHHTT-65B-R7N43

**Depth** 197 mm | 7.756 in  
**Length** 2100 mm | 82.677 in  
**Net Weight, antenna only** 37.5 kg | 82.673 lb

## Array Layout

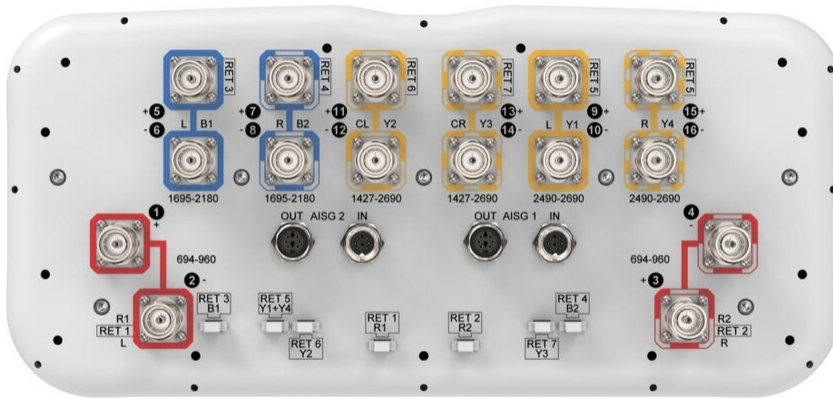


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7-8	4	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9-10	5	CPxxxxxxxxxxxxxxxxY1
Y4	2490-2690	15-16		
Y2	1427-2690	11-12	6	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	13-14	7	CPxxxxxxxxxxxxxxxxY3

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

Left Right  
Bottom

## Port Configuration



## Electrical Specifications

**Impedance** 50 ohm

# RRZZHHTT-65B-R7N43

<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 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>B1,B2</b>	<b>B1,B2</b>	<b>Y1,Y4</b>	<b>Y2,Y3</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	9,10,15,16	11,12,13,14
<b>Beamwidth, Horizontal, degrees</b>	66	60	57	69	65	60	69
<b>Beamwidth, Vertical, degrees</b>	10.4	9.4	8.7	5.6	5.3	4.4	6.8
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	16	14	16	18	21	18
<b>Front-to-Back Ratio at 180°, dB</b>	31	32	32	32	30	31	32
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	22	21	25	25	22	21
<b>CPR at Boresight, dB</b>	20	19	18	21	23	22	20
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27	27	27	26
<b>Isolation, Inter-band, dB</b>	27	27	27	27	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	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200	250

## Electrical Specifications, BASTA

	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.3	14.8	15	16.6	17.1	17.3	15.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.4	±0.5	±0.7	±0.4	±0.4	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±11	±6	±6	±6	±11	±6	±10
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.7	±0.6	±0.4	±0.3	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	16	14	13	15	16	16

# RRZZHHTT-65B-R7N43

## Electrical Specifications

	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
<b>Frequency Band, MHz</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	11,12,13,14	11,12,13,14	11,12,13,14	11,12,13,14
<b>Beamwidth, Horizontal, degrees</b>	66	64	63	58
<b>Beamwidth, Vertical, degrees</b>	5.6	5.2	4.7	4.4
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	15	15	18	16
<b>Front-to-Back Ratio at 180°, dB</b>	35	33	33	34
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27	27	27	27
<b>CPR at Boresight, dB</b>	19	19	21	18
<b>Isolation, Cross Polarization, dB</b>	26	26	26	26
<b>Isolation, Inter-band, dB</b>	27	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>	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200

## Electrical Specifications, BASTA

	1695–1995	1920–2300	2300–2500	2490–2690
<b>Frequency Band, MHz</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>	16.6	17.4	17.8	17.7
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.7	±0.4	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±8	±8	±6	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.5	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	15	15	14

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.46 m <sup>2</sup>   4.951 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.25 m <sup>2</sup>   2.691 ft <sup>2</sup>

# RRZZHHTT-65B-R7N43

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<b>Wind Loading @ Velocity, frontal</b>	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	780.0 N @ 150 km/h (175.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## 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>	2272 mm   89.449 in
<b>Weight, gross</b>	49.7 kg   109.57 lb

## Regulatory Compliance/Certifications

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

## \* Footnotes

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