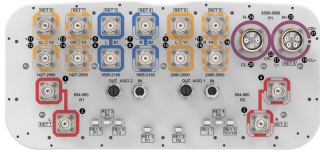


# RRZZHHTT-S4-B8V2



24-port sector antenna, 4x 694-960, 4x 1427-2690, 4x 1695-2180, 4x 2490-2690 and 8x 3300-3800 MHz, 65° HPBW, 8x RET

- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1427-2690MHz, suitable for 4x MIMO applications
- Includes 2x Single Column X-Pol Diplexed Arrays providing 4-Ports x 1695-2180MHz and 4 Ports x 2490-2690MHz, suitable for 4x MIMO applications
- Retractable tilt indicator rods
- Excellent wind loading characteristics
- MQ4/MQ5 cluster connector for 3.3-3.8GHz, equipped with calibration port
- Includes eight Internal RET's. All 2490-2690MHz (Y1&Y4) ports share common RET

**OBSOLETE**

This product was discontinued on: **March 30, 2024**

## General Specifications

<b>Antenna Type</b>	Sector and beamforming
<b>Band</b>	Multiband
<b>Calibration Connector Interface</b>	MQ5
<b>Calibration Connector Quantity</b>	1
<b>Color</b>	Light Gray (RAL 7035)
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>RF Connector Interface</b>	4.3-10 Female   MQ4   MQ5
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	20
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	24

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface, quantity</b>	2 female   2 male
<b>Internal RET</b>	High band (6)   Low band (2)
<b>Protocol</b>	3GPP/AISG 2.0

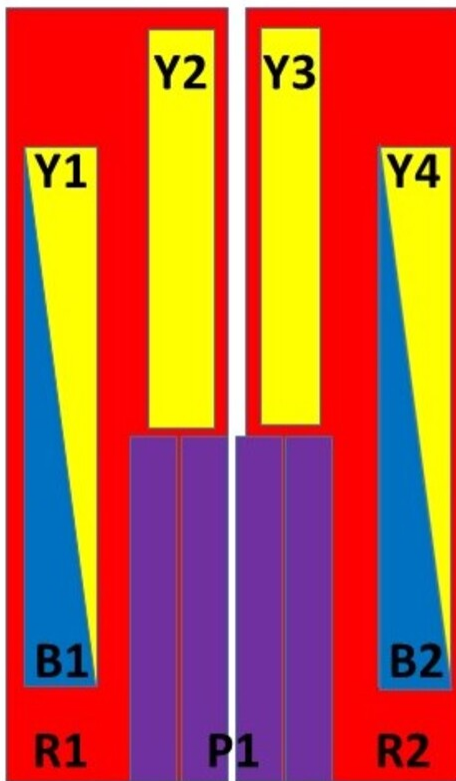
# RRZZHHTT-S4-B8V2

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## Dimensions

<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	41.2 kg   90.83 lb

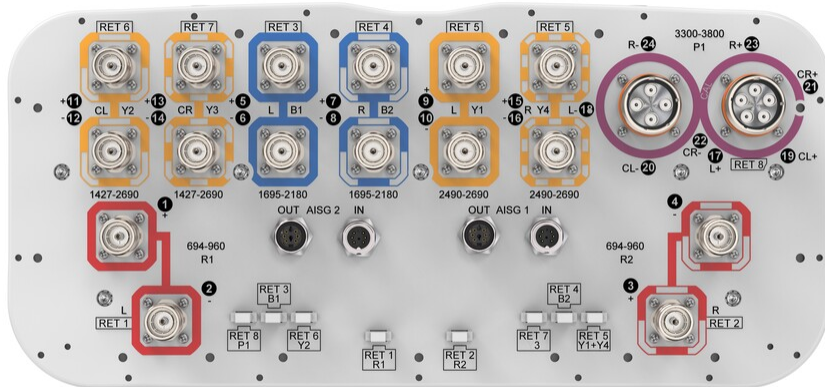
## Array Layout



Left                      Right  
                                Bottom

## Port Configuration

# RRZZHHTT-S4-B8V2



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   3300 – 3800 MHz   694 – 960 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	694-790	790-890	890-960	1427-1518	1695-2200	2300-2690	1695-2180	2490-2690	3300-3800
<b>Gain, dBi</b>	14.1	15	15	14.1	15.9	16.6	17.1	17.7	15.8
<b>Beamwidth, Horizontal, degrees</b>	70	60	59	69	63	61	69	64	82
<b>Beamwidth, Vertical, degrees</b>	10.6	9.5	8.7	9.9	7.6	6.2	5.2	4.2	6.2
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	20	19	18	13	18	20	19	21	16
<b>Front-to-Back Ratio at 180°, dB</b>	31	31	30	34	34	31	32	32	28
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	28	29	27	29	30	28	28	26	23
<b>Coupling level, Amp, Antenna port to Cal port, dB</b>									26
<b>Coupling level, max Amp Δ, Antenna port to Cal port, dB</b>									±2
<b>Coupler, max Amp Δ,</b>									0.9

# RRZZHHTT-S4-B8V2

## Antenna port to Cal port, dB

<b>Coupler, max Phase Δ, Antenna port to Cal port, degrees</b>									7
<b>Isolation, Cross Polarization, dB</b>	27	27	27	26	26	26	27	27	25
<b>Isolation, Inter-band, dB</b>	27	27	27	26	26	26	26	27	19
<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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153	-130
<b>Input Power per Port at 50° C, maximum, watts</b>	250	250	250	200	200	150	200	150	75

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–2200	2300–2690	1695–2180	2490–2690	3300–3800
<b>Gain by all Beam Tilts, average, dBi</b>	13.6	14.6	14.6	13.7	15.3	16.2	16.6	17.4	15.2
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	24	21	22	28	26	26	24	21
<b>CPR at Boresight, dB</b>	22	23	23	16	18	17	18	23	16
<b>CPR at Sector, dB</b>	10	10	8	4	4	2	9	6	8

## Electrical Specifications, Broadcast 65°

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	16.5
<b>Beamwidth, Horizontal, degrees</b>	59
<b>Beamwidth, Vertical, degrees</b>	6.1
<b>USLS (First Lobe), dB</b>	17

## Electrical Specifications, Service Beam

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Steered 0° Gain, dBi</b>	20.7
<b>Steered 0° Beamwidth, Horizontal, degrees</b>	24
<b>Steered 0° Front-to-Back Total Power at 180° ± 30°, dB</b>	29
<b>Steered 0° Horizontal</b>	15

# RRZZHHTT-S4-B8V2

<b>Sidelobe, dB</b>	
<b>Steered 30° Gain, dBi</b>	19.6
<b>Steered 30° Beamwidth, Horizontal, degrees</b>	28
<b>Steered 30° Front-to-Back Total Power at 180° ± 30°, dB</b>	26
<b>Steered 30° Horizontal Sidelobe, dB</b>	10

## Electrical Specifications, Soft Split

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	19.6
<b>Beamwidth, Horizontal, degrees</b>	31
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26
<b>Horizontal Sidelobe, dB</b>	16

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	538.0 N @ 150 km/h (120.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	829.0 N @ 150 km/h (186.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	387.0 N @ 150 km/h (87.0 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>	53.5 kg   117.947 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>

# RRZZHHTT-S4-B8V2

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ROHS Compliant

UK-ROHS Compliant



## 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