RRZZHHTT-65B-R6H4

16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695-2180 and 4x 2490-2690 MHz, 65° HPBW, 6x 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
- New endcap designs provide improved wind loading performance

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
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

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

Dimensions

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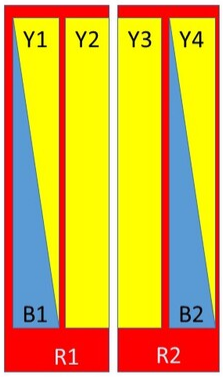
Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Net Weight, antenna only	42.3 kg | 93.255 lb
Length	2100 mm | 82.677 in

Array Layout

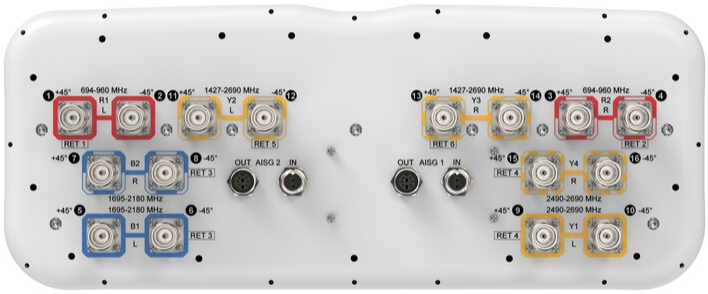


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxxB1
B2	1695-2180	7-8		
Y1	2490-2690	9-10	4	CPxxxxxxxxxxxxxxY1
Y4	2490-2690	15-16		
Y2	1427-2690	11-12	5	CPxxxxxxxxxxxxxxY2
Y3	1427-2690	13-14	6	CPxxxxxxxxxxxxxxY3

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

Left Right
Bottom

Port Configuration



Electrical Specifications

RRZZHHTT-65B-R6H4

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 1695 – 2180 MHz | 2490 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1427–1518**	**1695–1990**	**1920–2180**	**2300–2500**	**2490–2690**
Beamwidth, Horizontal, degrees	70	64	62	66	64	60	58	58
Beamwidth, Vertical, degrees	10.3	9	8.3	9.3	7.6	6.9	5.9	5.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	16	20	18	20	21	23
Front-to-Back Ratio at 180°, dB	32	32	31	33	35	35	33	31
Isolation, Cross Polarization, dB	28	28	28	26	27	27	26	28
Isolation, Inter-band, dB	28	28	28	27	27	27	28	28
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	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1427–1518**	**1695–1990**	**1920–2180**	**2300–2500**	**2490–2690**
Gain by all Beam Tilts, average, dBi	14.8	15.2	15.3	14.7	16.1	16.7	17.2	17.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.3	±0.5	±0.6	±0.7	±0.5	±0.7
Beamwidth, Horizontal Tolerance, degrees	±6.5	±4.2	±3.7	±5.5	±4.7	±4.1	±4.5	±5.4
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.7	±0.4	±0.5	±0.6	±0.6	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	16	16	16	16	17	18	17	17
Front-to-Back Total Power at 180° ± 30°, dB	22	21	20	22	28	29	28	27
CPR at Boresight, dB	21	19	18	18	18	18	17	18

CPR at Sector, dB	14	10	10	7	9	6	5	2

Electrical Specifications

Frequency Band, MHz	**1695–1990**	**1920–2180**	**2490–2690**
Beamwidth, Horizontal, degrees	66	61	60
Beamwidth, Vertical, degrees	5.3	4.9	4.1
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	24
Front-to-Back Ratio at 180°, dB	33	33	29
Isolation, Cross Polarization, dB	28	28	28
Isolation, Inter-band, dB	28	28	28
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	150

Electrical Specifications, BASTA

Frequency Band, MHz	**1695–1990**	**1920–2180**	**2490–2690**
Gain by all Beam Tilts, average, dBi	17.4	18.1	18.3
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.5	±0.4
Beamwidth, Horizontal Tolerance, degrees	±5	±4.5	±3.3
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	16	16	17
Front-to-Back Total Power at 180° ± 30°, dB	26	26	22
CPR at Boresight, dB	20	22	20
CPR at Sector, dB	7	6	6

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.68 m² | 7.319 ft²
Effective Projective Area (EPA), lateral	0.21 m² | 2.26 ft²

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Wind Loading @ Velocity, frontal	714.0 N @ 150 km/h (160.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	187.0 N @ 150 km/h (42.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	949.0 N @ 150 km/h (213.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	491.0 N @ 150 km/h (110.4 lbf @ 150 km/h)
Wind Speed, maximum	288 km/h | 178.955 mph

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	309 mm | 12.165 in
Length, packed	2287 mm | 90.039 in
Weight, gross	56.6 kg | 124.781 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance