

RHHTT-65A-R4-V2



10-port sector antenna, 2x 694–960, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 4x RET. High bands (H1/H2) arrays are diplexed at the element level.

- Independent tilt for 694-960 and 1695-2180 MHz arrays. Shared tilt for the two 2490-2690 MHz arrays

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

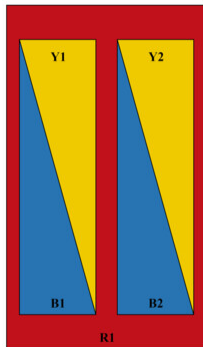
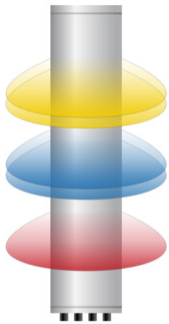
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (3) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0

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Dimensions

Width	350 mm 13.78 in
Depth	208 mm 8.189 in
Length	1400 mm 55.118 in
Net Weight, without mounting kit	20.3 kg 44.754 lb

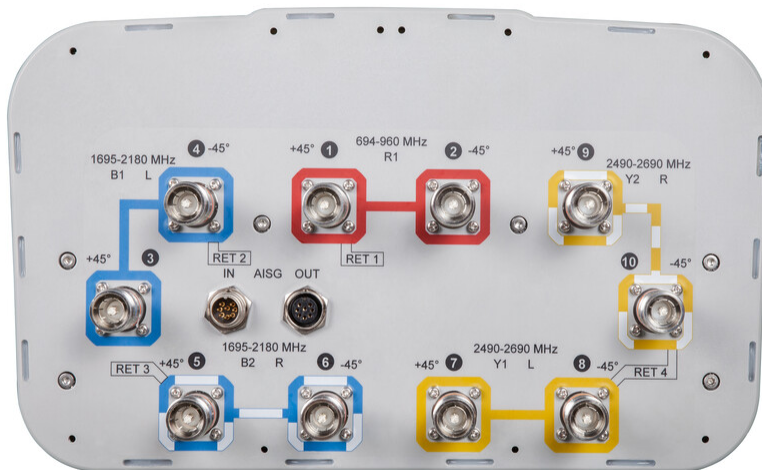
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2180	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	2490-2690	9 - 10	65°			

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
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Operating Frequency Band	1695 – 2180 MHz 2490 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–862	880–960	1695–1920	1920–2180	2490–2690
Gain, dBi	14.2	14.7	17.1	17.4	17.6
Beamwidth, Horizontal, degrees	68	63	61	61	65
Beamwidth, Vertical, degrees	16.2	14.1	7.4	6.8	5.6
Beam Tilt, degrees	3–18	3–18	3–13	3–13	3–13
USLS (First Lobe), dB	18	19	19	21	14
Front-to-Back Ratio at 180°, dB	32	32	31	36	38
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30
VSWR Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	300	300	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–862	880–960	1695–1920	1920–2180	2490–2690
Gain by all Beam Tilts, average, dBi	13.9	14.4	16.8	17.1	16.9
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±0.3	±0.9
Gain by Beam Tilt, average, dBi	3° 14.0 10° 14.0 18° 13.7	3° 14.7 10° 14.5 18° 14.0	3° 16.8 8° 16.9 13° 16.5	3° 17.1 8° 17.3 13° 16.9	3° 16.8 8° 17.1 13° 16.4
Beamwidth, Horizontal Tolerance, degrees	±2.4	±2.5	±3.8	±2.2	±2.2
Beamwidth, Vertical Tolerance, degrees	±1.4	±0.9	±0.4	±0.5	±0.4
USLS, beampeak to 20° above beampeak, dB	18	19	12	14	13
Front-to-Back Total Power at 180° ± 30°, dB	25	23	27	26	28

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CPR at Boresight, dB	20	21	20	20	19
CPR at Sector, dB	10	9	10	9	9

Mechanical Specifications

Wind Loading @ Velocity, frontal	221.0 N @ 150 km/h (49.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	185.0 N @ 150 km/h (41.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	469.0 N @ 150 km/h (105.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	234.0 N @ 150 km/h (52.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	448 mm 17.638 in
Depth, packed	355 mm 13.976 in
Length, packed	1544 mm 60.787 in
Weight, gross	33.9 kg 74.737 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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