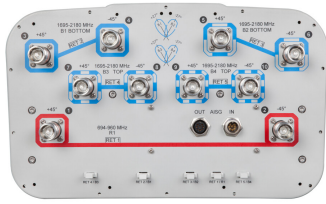


R2HH-6533D-R5



10-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW and 8x 1695–2180 MHz 4x 33°HPBW, 5x RET with tilt indicators

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

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	Copper 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

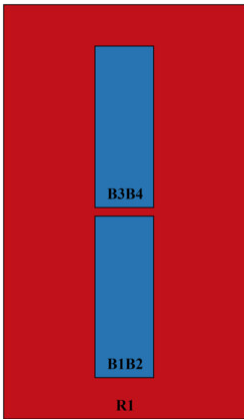
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	350 mm 13.78 in
Depth	208 mm 8.189 in
Length	2688 mm 105.827 in
Net Weight, without mounting kit	35 kg 77.162 lb

Array Layout

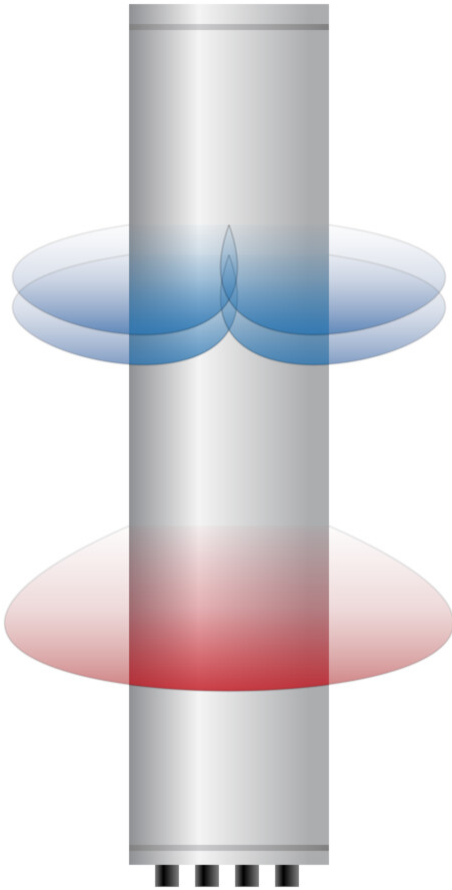


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
B1	1695-2180	3 - 4	2	AISG1	CPxxxxxxxxxxxxB1
B2	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxB2
B3	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxB3
B4	1695-2180	9 - 10	5	AISG1	CPxxxxxxxxxxxxB4

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

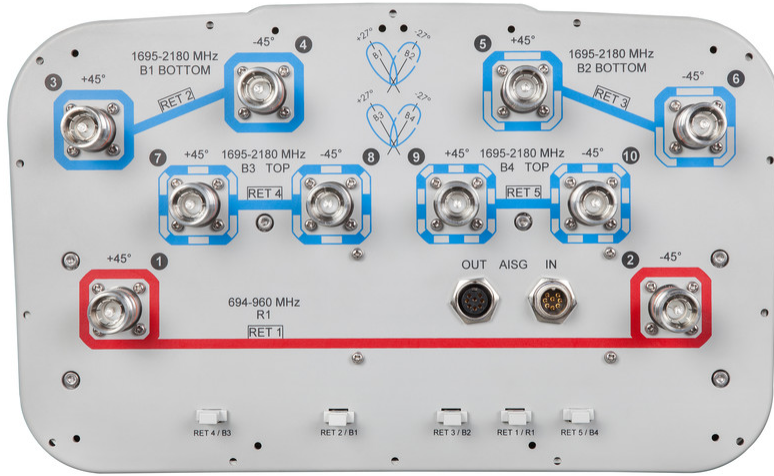
Beams Configuration

R2HH-6533D-R5



Port Configuration

R2HH-6533D-R5



Electrical Specifications

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

Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180
Gain, dBi	16.4	16.9	16.9	18.4	19.3	19.8
Beam Centers, Horizontal, degrees				±27	±27	±27
Beamwidth, Horizontal, degrees	68	65	65	33	31	31
Beamwidth, Vertical, degrees	8.9	8	7.4	7.2	6.8	6.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	20	19	16	16	17
Front-to-Back Ratio at 180°, dB	32	34	34	28	34	36
Isolation, Cross Polarization, dB	28	28	28	25	25	25

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Isolation, Inter-band, dB	30	30	30	30	30	30
Isolation, Beam to Beam, dB				17	17	17
VSWR Return loss, dB	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	16.3	16.7	16.8	17.7	18.8	19.3
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.3	±0.3	±1.1	±0.6	±0.7
Gain by Beam Tilt, average, dBi	2° 16.1 7° 16.3 12° 16.3	2° 16.5 7° 16.8 12° 16.6	2° 16.6 7° 16.9 12° 16.7	2° 17.6 7° 17.8 12° 17.5	2° 18.6 7° 18.9 12° 18.6	2° 19.1 7° 19.5 12° 18.9
Beamwidth, Horizontal Tolerance, degrees	±1.3	±1.4	±1.9	±1.8	±1.7	±1.7
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.4	±0.3	±0.3	±0.4
USLS, beampeak to 20° above beampeak, dB	17	18	17	15	16	17
Front-to-Back Total Power at 180° ± 30°, dB	25	24	24	24	27	28
CPR at Boresight, dB	16	17	17	16	17	18
CPR at Sector, dB	10	10	9			
CPR at 10 dB Horizontal Beamwidth, dB				6	8	10

Mechanical Specifications

Wind Loading @ Velocity, frontal	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	460 mm 18.11 in
Depth, packed	350 mm 13.78 in

R2HH-6533D-R5

Length, packed 2830 mm | 111.417 in

Weight, gross 50 kg | 110.231 lb

Regulatory Compliance/Certifications

Agency

CHINA-ROHS

ISO 9001:2015

ROHS

UK-ROHS

Classification

Above maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant/Exempted

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