R2HH-6533C-R5

10-port sector/multibeam antenna, 2x 694–960 sector and 8x 1695–2400 multibeam, 65° sector and 33° 4x multibeam, 5x RET with

- 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

OBSOLETE

This product was discontinued on: March 31, 2023

General Specifications

Antenna Type	Multibeam
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
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

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Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	2438 mm | 95.984 in
Net Weight, with installed actuator	33.5 kg | 73.855 lb

Array Layout

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
Y1	1695-2400	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2400	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1695-2400	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1695-2400	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY4

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

Beams Configuration

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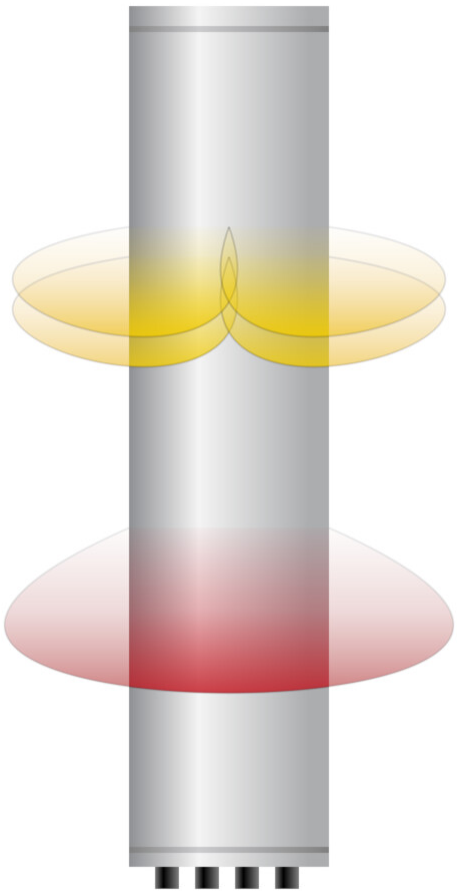

Port Configuration

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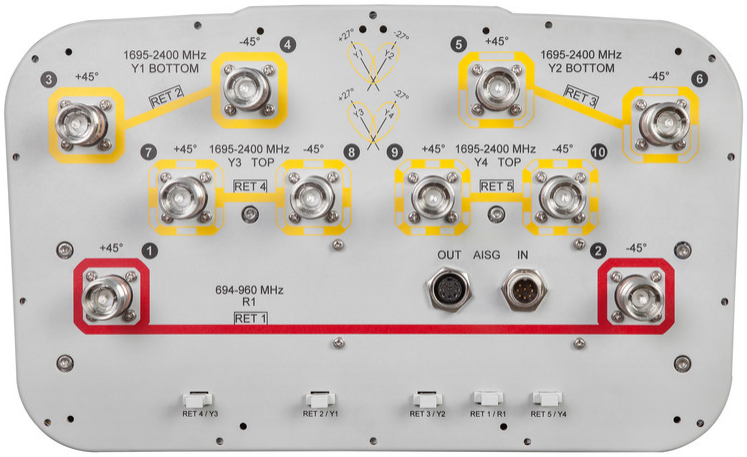

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2400 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**	**2300–2400**
Gain, dBi	16	16.5	16.6	18	18.7	19.3	19.7
Beam Centers, Horizontal, degrees				±27	±27	±27	±27
Beamwidth, Horizontal, degrees	69	67	67	34	32	31	28
Beamwidth, Vertical, degrees	9.7	8.7	8	7.8	7.4	7	6.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	19	15	15	15	16	17
Front-to-Back Ratio at 180°, dB	31	34	35	30	34	36	34
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25

Isolation, Inter-band, dB	30	30	30	30	30	30	30
Isolation, Beam to Beam, dB				17	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	1.46 | 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2400**
Gain by all Beam Tilts, average, dBi	15.8	16.3	16.4	17.3	18.3	18.9	19.2
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.3	±0.9	±0.6	±0.6	±1.1
Gain by Beam Tilt, average, dBi	2 ° | 15.7 7 ° | 15.9 12 ° | 15.8	2 ° | 16.2 7 ° | 16.4 12 ° | 16.3	2 ° | 16.2 7 ° | 16.5 12 ° | 16.4	2 ° | 17.2 7 ° | 17.4 12 ° | 17.2	2 ° | 18.1 7 ° | 18.4 12 ° | 18.2	2 ° | 18.7 7 ° | 19.0 12 ° | 18.8	2 ° | 19.3 7 ° | 19.4 12 ° | 18.7
Beamwidth, Horizontal Tolerance, degrees	±2.4	±1.4	±1.4	±1.3	±1.3	±1.9	±1.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.5	±0.4	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	16	18	15	15	15	16	17
Front-to-Back Total Power at 180° ± 30°, dB	25	24	25	23	28	29	29
CPR at Boresight, dB	14	15	16	17	18	20	16
CPR at Sector, dB	11	10	9				
CPR at 10 dB Horizontal Beamwidth, dB				5	8	10	7

Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	899.0 N @ 150 km/h (202.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	456 mm | 17.953 in

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Depth, packed	357 mm | 14.055 in
Length, packed	2585 mm | 101.772 in
Weight, gross	47.7 kg | 105.16 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
UK-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