

RR2HH-6533D-R6



12-port sector/multibeam antenna, 4x 694–960 MHz 65° HPBW and 8x 1695–2400 MHz 4x 33°HPBW, 6x 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

OBSOLETE

This product was discontinued on: November 30, 2023

Replaced By:

RR2VV-6533D-R6 12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33° HPBW, 6x RET

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
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	4
RF Connector Quantity, total	12

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

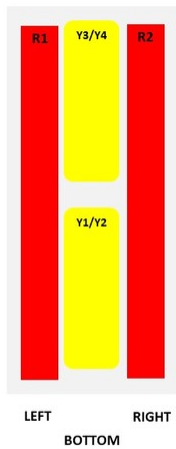
RR2HH-6533D-R6

Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2688 mm 105.827 in
Net Weight, without mounting kit	54 kg 119.049 lb

Array Layout

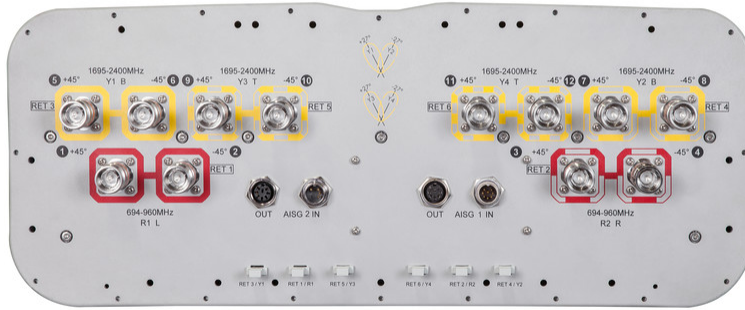


Array	Freq(MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPXXXXXXXXXXXXXXXXR1
R2	694-960	3-4	2	CPXXXXXXXXXXXXXXXXR2
Y1	1695 – 2400	5-6	3	CPXXXXXXXXXXXXXXXXY1
Y2	1695 – 2400	7-8	4	CPXXXXXXXXXXXXXXXXY2
Y3	1695 – 2400	9-10	5	CPXXXXXXXXXXXXXXXXY3
Y4	1695 – 2400	11-12	6	CPXXXXXXXXXXXXXXXXY4

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

Port Configuration

RR2HH-6533D-R6



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2400 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	700 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698–806	806–896	880–960	1695–1880	1850–1990	1920–2180	2300–2400
Gain, dBi	15.7	16	16.4	17.9	18.7	19.3	19.2
Beam Centers, Horizontal, degrees				±27	±27	±27	±27
Beamwidth, Horizontal, degrees	67	64	61	32	31	30	30
Beamwidth, Vertical, degrees	8.8	7.8	7.4	7.3	6.9	6.5	5.7
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	19	19	17	17	18	22
Front-to-Back Ratio at 180°, dB	32	31	31	35	35	36	34
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25

RR2HH-6533D-R6

Isolation, Inter-band, dB	30	30	30	30	30	30	30
Isolation, Beam to Beam, dB				17	17	17	17
VSWR Return loss, dB	1.5 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
Input Power per Port at 50°C, maximum, watts	300	300	300	150	150	150	150

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	880–960	1695–1880	1850–1990	1920–2180	2300–2400
Gain by all Beam Tilts, average, dBi	15.4	15.8	16	17.2	18.2	18.7	18.5
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±1.3	±0.6	±0.8	±1.6
Gain by Beam Tilt, average, dBi	2° 15.3 7° 15.5 12° 15.3	2° 15.7 7° 15.9 12° 15.7	2° 15.8 7° 16.1 12° 15.9	2° 17.0 7° 17.3 12° 16.9	2° 18.0 7° 18.3 12° 17.9	2° 18.5 7° 18.9 12° 18.4	2° 18.5 7° 18.8 12° 18.1
Beamwidth, Horizontal Tolerance, degrees	±6	±4.7	±3.4	±2.4	±1.2	±1.6	±1.4
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.5	±0.4	±0.3	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	17	16	17	15	16	16	13
Front-to-Back Total Power at 180° ± 30°, dB	21	22	22	29	30	30	29
CPR at Boresight, dB	19	18	18	16	16	18	13
CPR at Sector, dB	11	8	11				
CPR at 10 dB Horizontal Beamwidth, dB				4	7	8	9

Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	880.0 N @ 150 km/h (197.8 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
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RR2HH-6533D-R6

Depth, packed	309 mm 12.165 in
Length, packed	2935 mm 115.551 in
Weight, gross	75 kg 165.347 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

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| 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. |
| BSAMNT-M4 | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set. |

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance