

RRV4-65B-R6H4



12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET

- 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
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

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
Radome Material	Fiberglass, UV resistant
Radiator Material	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
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

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Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1848 mm 72.756 in
Net Weight, without mounting kit	36.5 kg 80.469 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	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

Left Bottom Right

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

Port Configuration

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Electrical Specifications

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

Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690
Gain, dBi	14.1	14.5	14.7	16.4	17.5	18	17.9
Beamwidth, Horizontal, degrees	70	65	62	68	61	59	58
Beamwidth, Vertical, degrees	11.5	10.3	9.4	7.4	6.6	5.8	5.5
Beam Tilt, degrees	2–14	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	19	18	17	17	19	17
Front-to-Back Ratio at 180°, dB	34	31	28	33	33	32	30
Isolation, Cross Polarization, dB	27	27	27	27	27	27	27
Isolation, Inter-band, dB	27	27	27	27	27	27	27
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

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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	250	250	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	13.7	14.2	14.4	15.9	16.9	17.6	17.4
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.4	±0.7	±0.8	±0.5	±0.5
Gain by Beam Tilt, average, dBi	2° 13.9 8° 13.8 14° 13.4	2° 14.3 8° 14.3 14° 13.8	2° 14.6 8° 14.5 14° 14.0	2° 15.6 7° 16.0 12° 15.8	2° 16.6 7° 17.1 12° 16.9	2° 17.4 7° 17.9 12° 17.3	2° 17.0 7° 17.6 12° 17.4
Beamwidth, Horizontal Tolerance, degrees	±7.1	±3.8	±3.2	±4.4	±5.6	±4.3	±5.2
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.7	±0.7	±0.5	±0.5	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	19	17	17	15	16	15	15
Front-to-Back Total Power at 180° ± 30°, dB	20	21	21	27	26	27	25
CPR at Boresight, dB	20	21	22	17	20	18	19
CPR at Sector, dB	13	11	14	7	6	8	6

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.65 m ² 6.997 ft ²
Effective Projective Area (EPA), lateral	0.22 m ² 2.368 ft ²
Mechanical Tilt Range	0°–17°
Wind Loading @ Velocity, frontal	694.0 N @ 150 km/h (156.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	235.0 N @ 150 km/h (52.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	571.0 N @ 150 km/h (128.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	368 mm 14.488 in
Length, packed	2034 mm 80.079 in

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Weight, gross

50.7 kg | 111.774 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-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.

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance