

RRV4-65A-R6VB



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
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
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	Aluminum
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

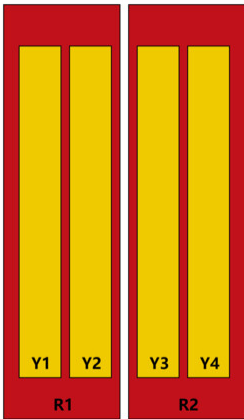
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (4)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

RRV4-65A-R6VB

Dimensions

Width	499 mm 19.646 in
Depth	199 mm 7.835 in
Length	1490 mm 58.661 in
Net Weight, antenna only	28.8 kg 63.493 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	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxY4

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°

RRV4-65A-R6VB

Total Input Power, maximum 1,000 W

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	698-806	790-894	890-960	1695-1995	1920-2300	2300-2500	2490-2690
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	5-12
Gain, dBi	14	14.4	14.6	17	17.4	17.8	18.1
Beamwidth, Horizontal, degrees	64	67	66	69	68	61	57
Beamwidth, Vertical, degrees	16	14.5	13.3	6.4	5.8	5.2	4.8
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	18	17	16	20	21	19
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	27	27	28	25	26	27	26
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
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, maximum, watts	250	250	250	200	200	200	200

Electrical Specifications, BASTA

	698-806	790-894	890-960	1695-1995	1920-2300	2300-2500	2490-2690
Frequency Band, MHz	698-806	790-894	890-960	1695-1995	1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	13.8	14.2	14.4	16.5	16.9	17.3	17.4
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.2	±0.3	±0.6	±0.6	±0.6	±0.7
Beamwidth, Horizontal Tolerance, degrees	±4	±3	±3	±10	±7	±7	±6
Beamwidth, Vertical Tolerance, degrees	±1	±0.8	±0.7	±0.4	±0.5	±0.3	±0.3
CPR at Boresight, dB	23	21	21	20	21	19	17

Mechanical Specifications

Wind Loading @ Velocity, frontal	422.0 N @ 150 km/h (94.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	197.0 N @ 150 km/h (44.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	748.0 N @ 150 km/h (168.2 lbf @ 150 km/h)

RRV4-65A-R6VB

Wind Speed, maximum 200 km/h (124 mph)

Packaging and Weights

Width, packed 570 mm | 22.441 in
Depth, packed 275 mm | 10.827 in
Length, packed 1775 mm | 69.882 in
Weight, gross 39.7 kg | 87.523 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-B92-08 – 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