

R-65C-R1VB-V4



2-port sector antenna, 2x 694–960MHz, 65°HPBW, 1x 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

General Specifications

Antenna Type	Sector
Band	Single band
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	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, low band	2
RF Connector Quantity, total	2

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 (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	320 mm 12.598 in
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Depth	140 mm 5.512 in
Length	2500 mm 98.425 in
Net Weight, antenna only	22.3 kg 49.163 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	CPxxxxxxxxxxxxxxxxR1

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

Port Configuration



Electrical Specifications

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Impedance	50 ohm
Operating Frequency Band	694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	500 W

Electrical Specifications

	R1	R1	R1
Frequency Band, MHz	694–790	790–890	890–960
RF Port	1,2	1,2	1,2
Gain, dBi	16.5	17.2	17.4
Beamwidth, Horizontal, degrees	69	66	64
Beamwidth, Vertical, degrees	8.9	7.8	7
Beam Tilt, degrees	0–10	0–10	0–10
USLS (First Lobe), dB	21	21	18
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	31	32	32
Isolation, Cross Polarization, dB	28	28	28
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port, maximum, watts	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960
Gain by all Beam Tilts, average, dBi	16.2	17	17.1
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.4
Beamwidth, Horizontal Tolerance, degrees	±2	±2	±1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.4
Front-to-Back Total Power at 180° ± 30°, dB	25	27	26
CPR at Boresight, dB	22	25	27
CPR at Sector, dB	13	13	11

Mechanical Specifications

Wind Loading @ Velocity, frontal	418.0 N @ 150 km/h (94.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	378.0 N @ 150 km/h (85.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	915.0 N @ 150 km/h (205.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	425 mm 16.732 in
Depth, packed	235 mm 9.252 in
Length, packed	2780 mm 109.449 in
Weight, gross	33.4 kg 73.634 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



* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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