R-85A-R1VB

2-port sector antenna, 2x 694–960 MHz, 85° HPBW, 1x RET

- 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	PVC, UV resistant
Radiator Material	Aluminum
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
RF Connector Quantity, mid band	0
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)

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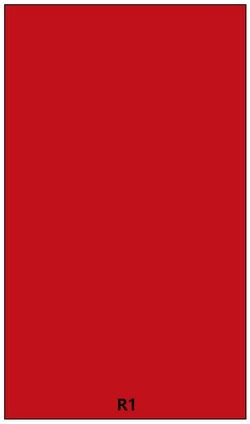
Dimensions

Width	320 mm | 12.598 in
Depth	166 mm | 6.535 in
Length	1495 mm | 58.858 in
Net Weight, antenna only	12 kg | 26.455 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	85°	1	AISG1	CPxxxxxxxxxxxxxxR1

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

Port Configuration

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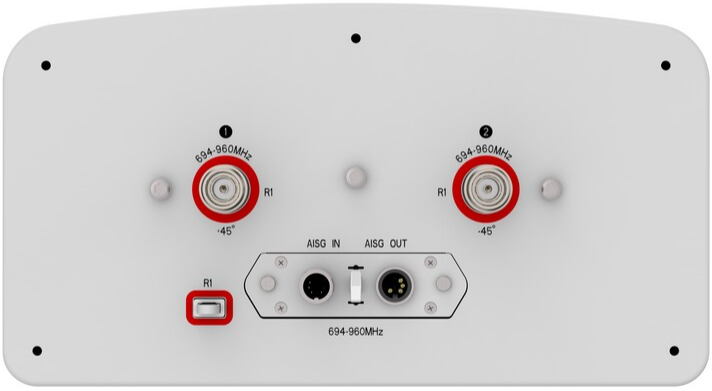

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	400 W

Electrical Specifications

	R1	R1	R1
Frequency Band, MHz	**698–806**	**790–894**	**890–960**
RF Port	1,2	1,2	1,2
Gain, dBi	14.2	14.8	14.8
Beamwidth, Horizontal, degrees	81	77	75
Beamwidth, Vertical, degrees	14.4	13.1	12.1
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	17	18	18
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	24	25	25
Isolation, Cross Polarization, dB	25	25	25

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VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	200	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	604.0 N @ 150 km/h (135.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	200.0 N @ 150 km/h (45.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	662.0 N @ 150 km/h (148.8 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	450 mm | 17.717 in
Depth, packed	280 mm | 11.024 in
Length, packed	1790 mm | 70.472 in
Weight, gross	21.8 kg | 48.061 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