

R-33D-R1VB



2-port sector antenna, 2x 694–960, 33° 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	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	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	579 mm 22.795 in
Depth	212 mm 8.346 in
Length	2658 mm 104.646 in
Net Weight, antenna only	35.3 kg 77.823 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	33°	1	AISG1	CPxxxxxxxxxxxxxxxxR1

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
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R-33D-R1VB

Operating Frequency Band	694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	500 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	19.1	19.5	20
Beamwidth, Horizontal, degrees	37	33	32
Beamwidth, Vertical, degrees	8.8	7.8	7.4
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	22	21	22
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	36	33	33
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	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300

Mechanical Specifications

Wind Loading @ Velocity, frontal	754.0 N @ 150 km/h (169.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	282.0 N @ 150 km/h (63.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	764.0 N @ 150 km/h (171.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	678 mm 26.693 in
Depth, packed	315 mm 12.402 in
Length, packed	2900 mm 114.173 in
Weight, gross	54.9 kg 121.034 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

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REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

BSAMNT-B92-04	–	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, one middle bracket set and one bottom bracket set
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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