

# 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

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	0
<b>RF Connector Quantity, mid band</b>	0
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	2

## Remote Electrical Tilt (RET) Information

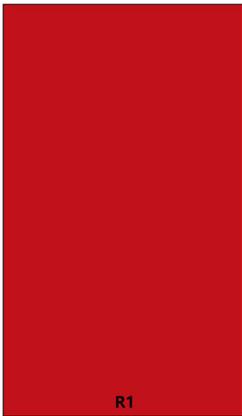
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (1)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W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

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## Dimensions

<b>Width</b>	579 mm   22.795 in
<b>Depth</b>	212 mm   8.346 in
<b>Length</b>	2658 mm   104.646 in
<b>Net Weight, antenna only</b>	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

<b>Impedance</b>	50 ohm
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# R-33D-R1VB

<b>Operating Frequency Band</b>	694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	500 W

## Electrical Specifications

	<b>R1</b>	<b>R1</b>	<b>R1</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>
<b>RF Port</b>	1,2	1,2	1,2
<b>Gain, dBi</b>	19.1	19.5	20
<b>Beamwidth, Horizontal, degrees</b>	37	33	32
<b>Beamwidth, Vertical, degrees</b>	8.8	7.8	7.4
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	22	21	22
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	36	33	33
<b>Isolation, Cross Polarization, dB</b>	28	28	28
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150
<b>Input Power per Port, maximum, watts</b>	300	300	300

## Mechanical Specifications

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

## Packaging and Weights

<b>Width, packed</b>	678 mm   26.693 in
<b>Depth, packed</b>	315 mm   12.402 in
<b>Length, packed</b>	2900 mm   114.173 in
<b>Weight, gross</b>	54.9 kg   121.034 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
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

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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