

# R-33D-R1VB-V2



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>	Aluminum
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<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)

## Dimensions

<b>Width</b>	497 mm   19.567 in
<b>Depth</b>	127 mm   5 in

# R-33D-R1VB-V2

**Length** 2697 mm | 106.181 in

**Net Weight, antenna only** 28 kg | 61.729 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  
**Operating Frequency Band** 694 – 960 MHz  
**Polarization** ±45°  
**Total Input Power, maximum** 500 W

## Electrical Specifications

R1

R1

R1

# R-33D-R1VB-V2

Frequency Band, MHz	694–790	790–890	890–960
RF Port	1,2	1,2	1,2
Gain, dBi	19.1	19.6	19.9
Beamwidth, Horizontal, degrees	40	35	31
Beamwidth, Vertical, degrees	7.9	7.1	6.6
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	20
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	34	33	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	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300

## Mechanical Specifications

**Wind Loading @ Velocity, lateral** 295.0 N @ 150 km/h (66.3 lbf @ 150 km/h)

## Packaging and Weights

<b>Width, packed</b>	592 mm   23.307 in
<b>Depth, packed</b>	247 mm   9.724 in
<b>Length, packed</b>	2897 mm   114.055 in
<b>Weight, gross</b>	43.6 kg   96.121 lb

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UK-ROHS	Compliant

## Included Products

BSAMNT-B95-02	–	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.
---------------	---	--

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance