

# R-85B-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

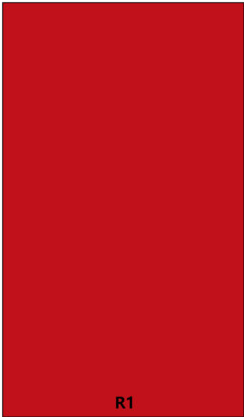
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	1 female   1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

# R-85B-R1VB

## Dimensions

Width	320 mm   12.598 in
Depth	166 mm   6.535 in
Length	1980 mm   77.953 in
Net Weight, antenna only	14.6 kg   32.187 lb

## Array Layout

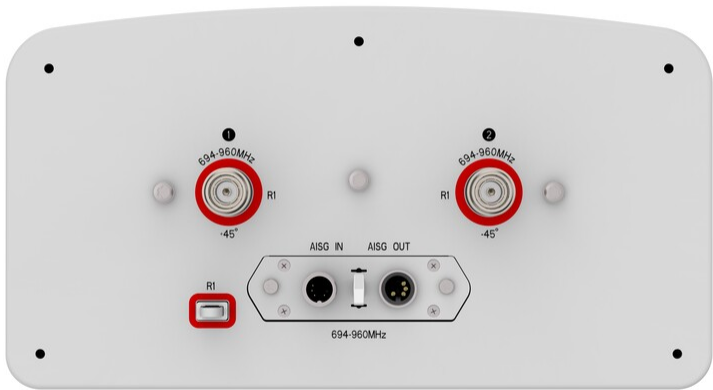


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	85°	1	AISG1	CPxxxxxxxxxxxxR1

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

## Port Configuration

# R-85B-R1VB



## 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	14.8	15.3	15.3
Beamwidth, Horizontal, degrees	82	79	76
Beamwidth, Vertical, degrees	12.1	11	10.3
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	18
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	23	25	26
Isolation, Cross Polarization, dB	25	25	25

# R-85B-R1VB

<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>	200	200	200

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	831.0 N @ 150 km/h (186.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	275.0 N @ 150 km/h (61.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	910.0 N @ 150 km/h (204.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	200 km/h (124 mph)

## Packaging and Weights

<b>Width, packed</b>	450 mm   17.717 in
<b>Depth, packed</b>	280 mm   11.024 in
<b>Length, packed</b>	2275 mm   89.567 in
<b>Weight, gross</b>	26.2 kg   57.761 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
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

BSAMNT-B98-01	–	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 and one bottom bracket set.
---------------	---	--

## \* Footnotes

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