

# 2VV-33C-R4-V4



8-port multibeam antenna, 8x 1695–2690 MHz, 4x 33° HPBW, 4xRET

- Enhances network capacity and spectrum utilization when used in six sector applications
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs – 3 antennas required for 6 sector configurations
- Utilizes RET-PMOD-A20-4A24

## General Specifications

<b>Antenna Type</b>	Multibeam
<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>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, mid band</b>	0
<b>RF Connector Quantity, low band</b>	0
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	2x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out: Female Pin3: RS485A(AISG_B), Pin5: RS485B(AISG_A), Pin6: DC 10~30V, Pin7: DC_Return
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W

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**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 395 mm | 15.551 in

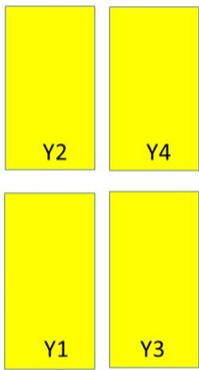
**Depth** 228 mm | 8.976 in

**Length** 2499 mm | 98.386 in

**Net Weight, without mounting kit** 30.4 kg | 67.02 lb

## Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
Y1	1695-2690	1-2	1	CPXXXXXXXXXXXXXXXXY1
Y2	1695-2690	3-4	2	CPXXXXXXXXXXXXXXXXY2
Y3	1695-2690	5-6	3	CPXXXXXXXXXXXXXXXXY3
Y4	1695-2690	7-8	4	CPXXXXXXXXXXXXXXXXY4



Bottom

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,200 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400	2490–2690
<b>Gain, dBi</b>	19	19.4	19.6	20	20.1
<b>Beam Centers, Horizontal, degrees</b>	±27	±27	±27	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	40	39	37	36	31
<b>Beamwidth, Vertical, degrees</b>	7.9	7.4	7	6.2	5.7
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12
<b>Horizontal Sidelobe, dB</b>	18	18	18	18	17
<b>USLS (First Lobe), dB</b>	16	16	16	17	20
<b>Front-to-Back Ratio at 180°, dB</b>	31	36	38	36	35
<b>Isolation, Cross Polarization,</b>	30	30	30	30	30

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dB					
Isolation, Inter-band, dB	30	30	30	30	30
Isolation, Beam to Beam, dB	28	28	28	28	28
VSWR   Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	200	200	200	200	200

## Mechanical Specifications

Wind Loading @ Velocity, frontal	525.0 N @ 150 km/h (118.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	386.0 N @ 150 km/h (86.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	898.0 N @ 150 km/h (201.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	540.0 N @ 150 km/h (121.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

Width, packed	505 mm   19.882 in
Depth, packed	386 mm   15.197 in
Length, packed	2631 mm   103.583 in
Weight, gross	44.4 kg   97.885 lb

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## Included Products

- BSAMNT-3 – 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

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

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