

2VV-33C-R4



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

- 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

OBSOLETE

This product was discontinued on: **November 30, 2023**

Replaced By:

2VV-33C-R4-V6

8-port multibeam antenna, 8x 1695–2690 MHz, 4x 33° HPBW, 4x RET, has tilt scales

General Specifications

Antenna Type	Multibeam
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 Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	0
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc

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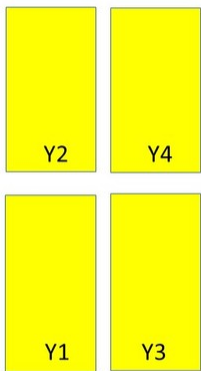
Internal RET	High band (4)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	395 mm 15.551 in
Depth	228 mm 8.976 in
Length	2499 mm 98.386 in
Net Weight, without mounting kit	36 kg 79.366 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

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

Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400	2490–2690
Gain, dBi	18.4	19	19.4	19.8	20.2
Beam Centers, Horizontal, degrees	±27	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	39	37	36	34	29
Beamwidth, Vertical, degrees	7.9	7.4	6.9	6.2	5.6
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	16	20	19
Front-to-Back Ratio at 180°, dB	32	33	33	33	31
Isolation, Cross Polarization, dB	25	25	25	25	25

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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	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200	200	200

Mechanical Specifications

Mechanical Tilt Range	0°–12°
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	51.8 kg 114.199 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-4	–	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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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