VV-33A-R2VB

4-port sector antenna, 4x 1695–2690 MHz, 33°HPBW, 2x RETs

- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Ideal for high gain corridor coverage or capacity optimization
- All Internal RET actuators are connected in "Cascaded SRET" configuration

General Specifications

Antenna Type	Sector
Band	Single band
Radome Color	Light Gray (RAL 7035)
Lightning Protection	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Type	4.3-10 Female
RF Connector Position	Bottom
RF Connector Quantity, Mid band	4
RF Connector Quantity, Total	4

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
Compatible Standards	3GPP/AISG 2.0 (Single RET)
Low power consumption	2 W
High power consumption	10 W
Input Voltage	10–30 Vdc
Internal RET, Mid band	2
RET Interface, quantity	1 Male | 1 Female

Antenna Dimensions and Weight

Height	1500 mm | 59.1 in
Width	498 mm | 19.6 in
Depth	197 mm | 7.8 in
Net weight	21.6 kg | 47.6 lb

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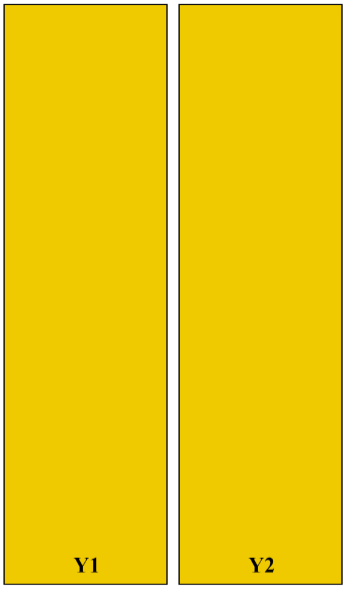
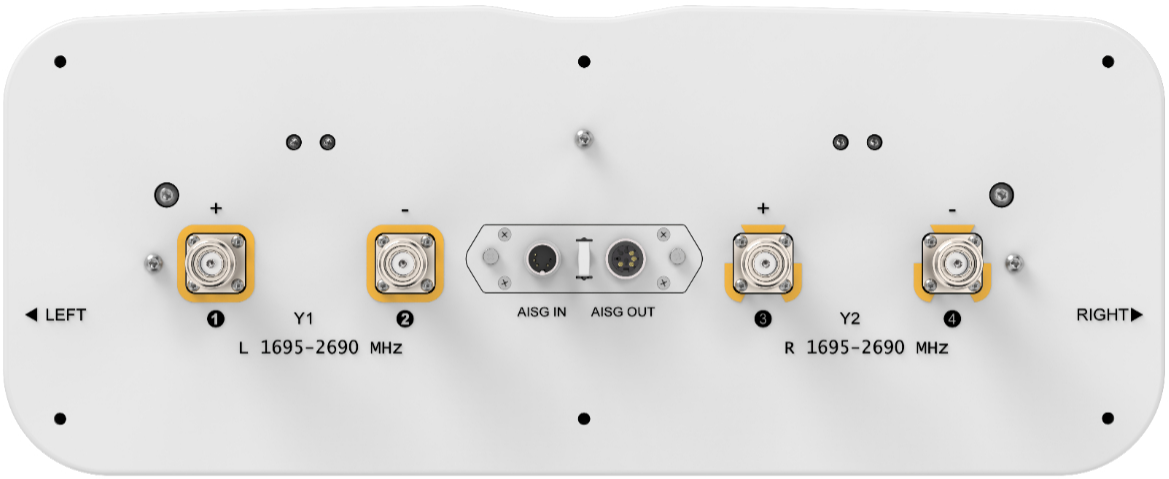
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2690	1 - 2	33°	1	AISG1	CPxxxxxxxxxxxxxxxY1
Y2	1695-2690	3 - 4	33°	2	AISG1	CPxxxxxxxxxxxxxxxY2

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

Port Configuration



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Electrical Specifications

Frequency Range, MHz	1695 – 2690 MHz
Maximum Effective Power Whole Antenna	500 W
Impedance, ohms	50 ohm
Polarization	±45°

Electrical Specifications

RF Ports	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4
Array	Y1, Y2	Y1, Y2	Y1, Y2	Y1, Y2	Y1, Y2
Frequency Sub-Range, MHz	1695-1880	1850-1990	1920-2180	2300-2500	2500-2690
Gain, dBi	20.4	20.9	21.4	22	21.9
Gain over all tilts, dBi	19.9 ±0.7	20.6 ±0.4	21.2 ±0.5	21.7 ±0.4	21.6 ±0.5
Azimuth Beamwidth @3dB, degrees	38 ±3.3	33 ±2.2	30 ±3.1	25 ±1.6	26 ±1.6
Elevation Beamwidth, degrees	6.7 ±0.4	6.3 ±0.3	5.8 ±0.4	5 ±0.2	4.7 ±0.2
Electrical Downtilt Range, degrees	2-12	2-12	2-12	2-12	2-12
First Upper Sidelobe Suppression, dB	17	20	19	20	18
Front-to-Back Ratio, 180°±30° Region (Co-Pol Only), dB	29	30	30	30	26
Cross-Polar Discrimination at Mechanical boresight, dB	20	22	22	24	20
Isolation, Cross-Polarization, dB	28	28	28	28	28
Isolation, Inter-band, 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
Passive Intermodulation, 3rd Order, 2 x 20W, dBc	-150	-150	-150	-150	-150
Maximum Effective Power per Port, watts	200	200	200	200	200

Material Specifications

Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum

Mechanical Specifications

Windload – Frontal	549 N @ 150 km/h (123.4 lbf @ 150 km/h)
Windload – Lateral	183 N @ 150 km/h (41.1 lbf @ 150 km/h)
Windload – Rear	452 N @ 150 km/h (101.6 lbf @ 150 km/h)
Survival Wind Speed	241 km/h | 150 mph

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Packaging and Weights

Height, packed	1755 mm | 69.1 in
Width, packed	560 mm | 22.0 in
Depth, packed	280 mm | 11.0 in
Shipping Weight	33.5 kg | 73.9 lb

Regulatory Compliance/Certifications

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

Included Products

BSAMNT-B92-05 — 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

Values compliant with BASTA recommendations