

RRV42VV-6533D-R10



20-port sector/multibeam antenna 4x 694–960 MHz , 8x 1695–2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 10x RET. Band cascaded SRET

General Specifications

Antenna Type	Multibeam
Band	Multiband
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 EN1991-1-4 standard
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	16
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

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
Internal RET	High band (8) Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

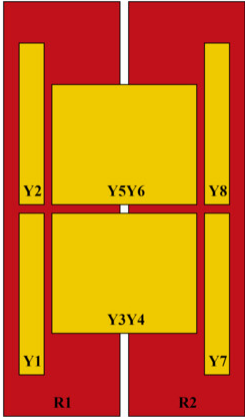
Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2688 mm 105.827 in

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Net Weight, antenna only

58.6 kg | 129.191 lb

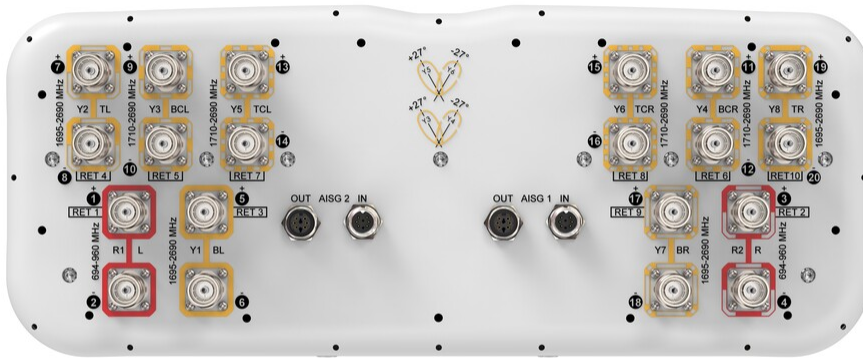
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxY4
Y5	1710-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxY5
Y6	1710-2690	15 - 16	33°	8	AISG1	CPxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	65°	9	AISG1	CPxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	65°	10	AISG1	CPxxxxxxxxxxxxY8

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

Port Configuration



Electrical Specifications

Impedance

50 ohm

Operating Frequency Band

1695 – 2690 MHz | 1710 – 2690 MHz | 694 – 960 MHz

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Polarization	±45°
Total Input Power, maximum	1,300 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2690	1710–1920	1920–2180	2300–2690
Gain, dBi	15.6	15.9	15.9	15.7	16.9	17.7	17.5	19	19.4
Beam Centers, Horizontal, degrees							±27	±27	±27
Beamwidth, Horizontal, degrees	71	65	63	76	67	59	37	34	28
Beamwidth, Vertical, degrees	9.3	8.3	7.6	7.1	6.4	5.4	7.2	6.5	5.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	16	16	16	19	16	18	20
Front-to-Back Ratio at 180°, dB	30	28	30	32	30	33	39	38	35
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB							17	17	17
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	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	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	150	200	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2690	1710–1920	1920–2180	2300–2690
Gain by all Beam Tilts, average, dBi	15.1	15.6	15.7	15.2	16.3	17.3	17	18.4	18.8
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.4	±0.8	±0.7	±0.4	±1.1	±0.9	±1
Beamwidth, Horizontal Tolerance, degrees	±7.9	±9.2	±5.4	±6.7	±7	±4.5	±3.4	±2.3	±3.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.3	±0.5	±0.4	±0.4	±0.5	±0.4	±0.5
USLS, beampeak to 20° above beampeak, dB	17	16	15	14	16	14	15	15	13
Front-to-Back Total Power	22	22	23	23	23	25	31	31	28

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at 180° ± 30°, dB

CPR at Boresight, dB	23	22	18	19	22	23	16	20	20
CPR at Sector, dB	12	9	13	8	6	8			
CPR at 10 dB Horizontal Beamwidth, dB							6	11	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	944.0 N @ 150 km/h (212.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	292.0 N @ 150 km/h (65.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,130.0 N @ 150 km/h (254.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	650.0 N @ 150 km/h (146.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2935 mm 115.551 in
Weight, gross	80.4 kg 177.251 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.
- BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 6.5 kg | 14.33 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



BSAMNT-M4



Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 4.6 kg | 10.141 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

