2RR2VV-33C-R4

16-port multibeam antenna, 8x 694–960 MHz, 2x 2-beam 33° HPBW and 8x 1695–2690 MHz, 2x 2-beam 33° HPBW, 4x RET

- Provides 4T4R capability in low and mid bands
- Twin beam patterns are optimized for minimum beam crossover providing for improved LTE data throughput
- GREEN and High Capacity Antenna Solution
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- "Green" packaging of reduced size and gross weight that uses less material and reduces shipping pollution
- Optional Mounting Kits with mechanical tilt capacity need to be ordered separately

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
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	8
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) | Mid band (2)

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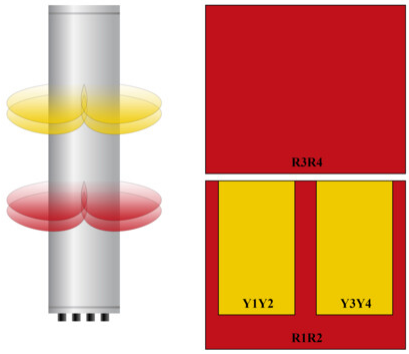
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	2235 mm | 87.992 in
Net Weight, antenna only	63.5 kg | 139.993 lb

Array Layout

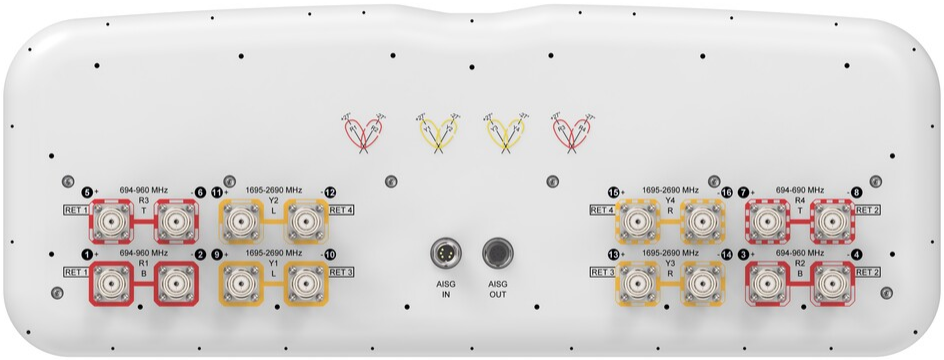


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R3	694-960	5 - 6			
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
R4	694-960	7 - 8			
Y1	1695-2690	9 - 10	3	AISG1	CPxxxxxxxxxxxxxxY1
Y3	1695-2690	13 - 14			
Y2	1695-2690	11 - 12	4	AISG1	CPxxxxxxxxxxxxxxY2
Y4	1695-2690	15 - 16			

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

Port Configuration

2RR2VV-33C-R4



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,500 W @ 50 °C

Electrical Specifications

	R1-R4	R1-R4	R1-R4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1710–1990**	**1920–2300**	**2300–2500**	**2490–2690**
RF Port	1-8	1-8	1-8	9-16	9-16	9-16	9-16
Gain at Mid Tilt, dBi	14.1	15.2	15.7	17.4	18.4	18.7	18.4
Beamwidth, Horizontal, degrees	40	37	34	34	31	28	25
Beamwidth, Vertical, degrees	19.4	17.6	16.2	7.8	7.2	6.3	5.9
Beam Tilt, degrees	2–16	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	16	15	16	17	14
Front-to-Back Ratio at 180°, dB	28	33	32	33	34	32	30
Isolation, Cross Polarization,	25	25	25	25	25	25	25

dB							
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB	17	17	17	17	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200	200	200	150	150

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1710–1990**	**1920–2300**	**2300–2500**	**2490–2690**
Gain by all Beam Tilts, average, dBi	14.1	15.2	15.6	17.3	18.2	18.5	18.2
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.9	±0.8	±1.1	±0.7	±0.9	±0.8
Beamwidth, Horizontal Tolerance, degrees	±3	±2	±3	±3	±2	±2	±3
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.2	±0.5	±0.2	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	23	20	19	12	15	15	14
Front-to-Back Total Power at 180° ± 30°, dB	22	26	26	27	28	27	25
CPR at Boresight, dB	17	17	18	17	19	20	16
CPR at 10 dB Horizontal Beamwidth, dB	5	8	9	11	12	9	6

Mechanical Specifications

Wind Loading @ Velocity, frontal	895.0 N @ 150 km/h (201.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	262.0 N @ 150 km/h (58.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,140.0 N @ 150 km/h (256.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	558.0 N @ 150 km/h (125.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	744 mm | 29.291 in
Depth, packed	346 mm | 13.622 in
Length, packed	2364 mm | 93.071 in
Weight, gross	79.5 kg | 175.267 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

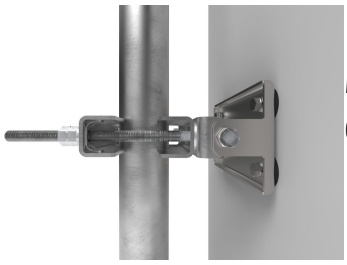
Included Products

BSAMNT-3F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

BSAMNT-3F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

Product Classification

Product Type	Fixed tilt 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	5.6 kg | 12.346 lb

Material Specifications

Material Type	Galvanized steel

Packaging and Weights

Included	Brackets | Hardware
Packaging quantity	1
Weight, gross	5.8 kg | 12.787 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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-3F