

# RRZZ2VV-6533D-R8



16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1427–2690 MHz 65° HPBW and 8x 1695–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

- Optional Mounting Kits with mechanical tilt capacity need to be ordered separately
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- "Green" packaging of reduced size and gross weight that uses less material and reduces shipping pollution
- GREEN and High Capacity Antenna Solution

## General Specifications

<b>Antenna Type</b>	Multibeam
<b>Band</b>	Multiband
<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>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	12
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

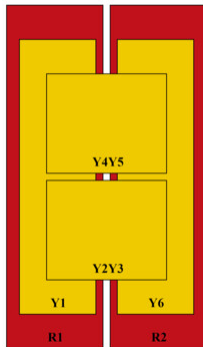
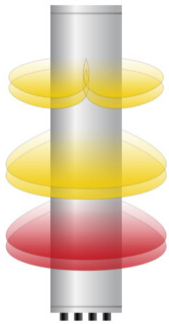
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (6)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

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## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2577 mm   101.457 in
<b>Net Weight, antenna only</b>	50 kg   110.231 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	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	65°	8	AISG1	CPxxxxxxxxxxxxxxxxY6

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,700 W @ 50 °C

## Electrical Specifications

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Frequency Band, MHz	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16
Gain at Mid Tilt, dBi	15.4	15.6	15.8	15.2	16.9	17.8	18.5	18.9
Beamwidth, Horizontal, degrees	70	68	65	82	75	68	61	57
Beamwidth, Vertical, degrees	9.5	8.7	8	7.2	5.9	5.3	4.7	4.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	19	17	20	17	17	17	19
Front-to-Back Ratio at 180°, dB	29	29	31	31	32	30	32	33
Front-to-Back Total Power at 180° ± 30°, dB	21	21	20	22	23	23	24	23
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	200	200

## Electrical Specifications, BASTA

Frequency	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
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<b>Band, MHz</b>								
<b>Gain by all Beam Tilts, average, dBi</b>	15.3	15.5	15.7	15.1	16.7	17.6	18.2	18.6
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.4	±0.6	±0.7	±0.7	±0.4	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±11	±9	±8	±5	±8	±7	±3	±4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.6	±0.6	±0.4	±0.4	±0.4	±0.3	±0.3
<b>CPR at Boresight, dB</b>	20	18	16	17	20	20	22	20
<b>CPR at Sector, dB</b>	11	11	11	4	7	5	9	2

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>1710–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14
<b>Gain at Mid Tilt, dBi</b>	17.8	19	19.3	19.7
<b>Beamwidth, Horizontal, degrees</b>	35	32	29	26
<b>Beamwidth, Vertical, degrees</b>	7.2	6.5	5.8	5.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	17	17	16
<b>Front-to-Back Ratio at 180°, dB</b>	34	36	34	33
<b>Front-to-Back Total Power at</b>	28	30	29	28

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**180° ± 30°,  
dB**

<b>Isolation, Cross Polarization, dB</b>	25	25	25	25
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<b>Isolation, Inter-band, dB</b>	25	25	25	25
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<b>Isolation, Beam to Beam, dB</b>	17	17	17	17
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<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
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<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153
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<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	200	200
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## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1710–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	17.6	18.8	19.1	19.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±1.1	±0.9	±0.8	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3	±3	±2	±2
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.5	±0.3	±0.3
<b>CPR at Boresight, dB</b>	16	20	21	20

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<b>CPR at 10 dB</b>	9	12	13	12
<b>Horizontal Beamwidth, dB</b>				

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	899.0 N @ 150 km/h (202.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	278.0 N @ 150 km/h (62.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,076.0 N @ 150 km/h (241.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	619.0 N @ 150 km/h (139.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2764 mm   108.819 in
<b>Weight, gross</b>	66 kg   145.505 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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



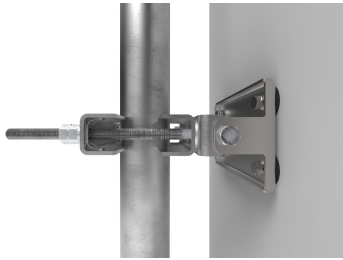
## Included Products

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

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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# 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3F

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