

# RRZ4V4-65D-R10V3



20-port sector antenna, 4x694-960 (R1 & R2), 8x1427-2690 (Y3-Y6) and 8 x 1695-2690 MHz (Y1/Y2/Y7/Y8), 65° HPBW, 10xRET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- SEED® antenna providing high gain and improved efficiency
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Retractable tilt indicator rods

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	16
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	20

## 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 (8)
<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)

## Dimensions

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<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2769 mm   109.016 in
<b>Net Weight, without mounting kit</b>	47.7 kg   105.16 lb

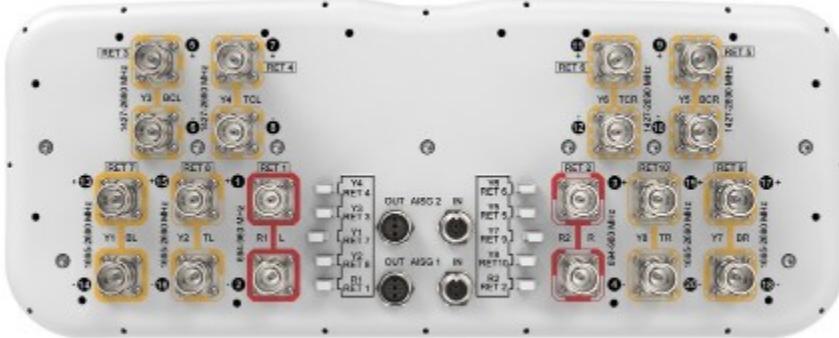
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY4
Y5	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY5
Y6	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxY6
Y1	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxY2
Y7	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxY8

(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>	1,600 W @ 50 °C

## Electrical Specifications

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	R1,R2	R1,R2	R1,R2
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	1,2,3,4
<b>Gain at Mid Tilt, dBi</b>	16.3	16.7	17
<b>Beamwidth, Horizontal, degrees</b>	71	64	65
<b>Beamwidth, Vertical, degrees</b>	7.6	6.8	6.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	21	20
<b>Front-to-Back Ratio at 180°, dB</b>	29	29	32
<b>Isolation, Cross Polarization, dB</b>	28	28	28
<b>Isolation, Inter-band, dB</b>	28	28	28
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300

## Electrical Specifications

	Y1,Y7	Y1,Y7	Y1,Y7	Y1,Y7	Y2,Y8	Y2,Y8	Y2,Y8	Y2,Y8
<b>Frequency Band, MHz</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	13,14,17,18	13,14,17,18	13,14,17,18	13,14,17,18	15,16,19,20	15,16,19,20	15,16,19,20	15,16,19,20

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<b>Gain at Mid Tilt, dBi</b>	16.8	17.8	18.5	18.5	16.9	17.9	18.4	18.4
<b>Beamwidth, Horizontal, degrees</b>	72	64	57	60	71	63	56	59
<b>Beamwidth, Vertical, degrees</b>	6.9	6.1	5.3	5	6.5	5.7	5	4.7
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	16	17	18	14	14	14	20
<b>Front-to-Back Ratio at 180°, dB</b>	30	27	28	28	28	28	31	30
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200	250	250	200	200

## Electrical Specifications

	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5	Y4,Y6	Y4,Y6	Y4,Y6	Y4,Y6
<b>Frequency Band, MHz</b>	<b>1427–1518 1695–1995 1920–2300 2300–2500 2490–2690 01427–1518 1695–1995 1920–2300 2300–2500 2490–2690</b>								
<b>RF Port</b>	5,6,9,10	5,6,9,10	5,6,9,10	5,6,9,10	5,6,9,10	7,8,11,12	7,8,11,12	7,8,11,12	7,8,11,12
<b>Gain at Mid Tilt, dBi</b>	15.5	17.2	18.5	19.4	19.5	15.7	17.4	18.5	19.2
<b>Beamwidth, Horizontal,</b>	79	67	58	52	49	75	67	58	50

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## degrees

<b>Beamwidth, Vertical, degrees</b>	8.3	7	6.1	5.3	5	7.8	6.5	5.7	5	4.7
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	12	17	16	18	17	19	17	16	18	22
<b>Front-to-Back Ratio at 180°, dB</b>	32	34	37	38	35	34	36	40	36	39
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	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	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	250	250	250	200	200

## Mechanical Specifications

<b>BASTA Version, mechanical</b>	BASTA v12
<b>Wind Loading @ Velocity, frontal</b>	942.0 N @ 150 km/h (211.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	246.0 N @ 150 km/h (55.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,251.0 N @ 150 km/h (281.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	648.0 N @ 150 km/h (145.7 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>	318 mm   12.52 in

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**Length, packed** 2890 mm | 113.78 in

**Weight, gross** 61 kg | 134.482 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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UK-ROHS	Compliant
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## Included Products

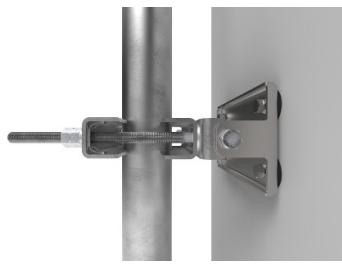
BSAMNT-2F	- Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

# BSAMNT-2F

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

## Product Classification

<b>Product Type</b>	Fixed tilt mounting kit
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## General Specifications

<b>Application</b>	Outdoor
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<b>Color</b>	Silver
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## Dimensions

<b>Compatible Diameter, maximum</b>	115 mm   4.528 in
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<b>Compatible Diameter, minimum</b>	60 mm   2.362 in
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<b>Weight, net</b>	3.8 kg   8.378 lb
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## Material Specifications

<b>Material Type</b>	Galvanized steel
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## Packaging and Weights

<b>Included</b>	Brackets   Hardware
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<b>Packaging quantity</b>	1
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<b>Weight, gross</b>	4 kg   8.818 lb
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-2F

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