

# RRZZV6-65D-R10F



20-port sector antenna, 4x694-960 (R1 & R2), 4x1427-2690 (Y3 & Y5) and 12 x 1695-2690 MHz (Y1/Y2/Y4/Y6/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
- Antenna shape optimized for wind load reduction

## General Specifications

<b>Antenna Type</b>	Sector
<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>	16
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	20

## Remote Electrical Tilt (RET) Information

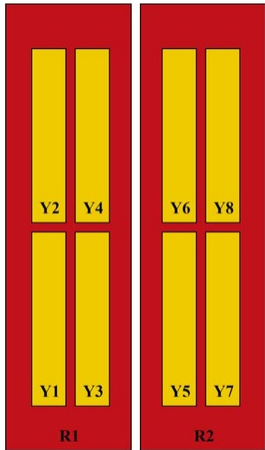
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (8)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</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>	2688 mm   105.827 in
<b>Net Weight, antenna only</b>	46.1 kg   101.633 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY3
Y5	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY5
Y1	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY2
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY4
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxxxY8

(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>	900 W @ 50 °C

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## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>Y1,Y2,Y4,Y6,Y7,Y8</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–896</b>	<b>890–960</b>	<b>1695–1990</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	1,2,3,4	9 to 20
<b>Gain at Mid Tilt, dBi</b>	16.2	16.3	16.3	16.4
<b>Beamwidth, Horizontal, degrees</b>	67	62	63	70
<b>Beamwidth, Vertical, degrees</b>	8.5	7.6	7	7.3
<b>Beam Tilt, degrees</b>	2–13	2–13	2–13	2–12
<b>USLS (First Lobe), dB</b>	19	20	24	16
<b>Front-to-Back Ratio at 180°, dB</b>	35	31	31	34
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	22	22	29
<b>CPR at Boresight, dB</b>	31	24	24	23
<b>CPR at Sector, dB</b>	10	7	8	8
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25
<b>Isolation, Inter-band, dB</b>	28	28	28	25
<b>VSWR   Return loss, dB</b>	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
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200

## Electrical Specifications, BASTA

	<b>698–806</b>	<b>790–896</b>	<b>890–960</b>	<b>1695–1990</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–896</b>	<b>890–960</b>	<b>1695–1990</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16	16.1	16.1	16.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.4	±0.8
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4	±3	±4	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.5	±0.5	±0.7
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	16	18	16

## Electrical Specifications

	<b>Y1,Y2,Y4,Y6,Y7,Y8</b>	<b>Y1,Y2,Y4,Y6,Y7,Y8</b>	<b>Y1,Y2,Y4,Y6,Y7,Y8</b>	<b>Y3,Y5</b>
<b>Frequency Band, MHz</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>	<b>1427–1518</b>
<b>RF Port</b>	9 to 20	9 to 20	9 to 20	5,6,7,8

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Gain at Mid Tilt, dBi	17.3	17.9	18.1	15.3
Beamwidth, Horizontal, degrees	62	56	56	66
Beamwidth, Vertical, degrees	6.5	5.7	5.3	9.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	20	21	17
Front-to-Back Ratio at 180°, dB	33	31	31	34
Front-to-Back Total Power at 180° ± 30°, dB	28	27	27	28
CPR at Boresight, dB	22	20	20	22
CPR at Sector, dB	6	6	4	9
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR   Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	1920-2300	2300-2500	2490-2690	1427-1518
Gain by all Beam Tilts, average, dBi	17.1	17.7	17.8	15.2
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.5	±0.4
Beamwidth, Horizontal Tolerance, degrees	±7	±3	±5	±9
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.3	±0.2	±0.6
USLS, beampeak to 20° above beampeak, dB	17	17	17	15

## Electrical Specifications

	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5
Frequency Band, MHz	1695-1990	1920-2300	2300-2500	2490-2690
RF Port	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
Gain at Mid Tilt, dBi	16.7	17.4	18	17.9
Beamwidth, Horizontal, degrees	62	55	52	53
Beamwidth, Vertical, degrees	7.5	6.8	6	5.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	16	17
Front-to-Back Ratio at 180°, dB	38	37	34	34

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<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	32	31	29	28
<b>CPR at Boresight, dB</b>	21	21	25	22
<b>CPR at Sector, dB</b>	8	5	6	2
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25
<b>Isolation, Inter-band, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1695–1990</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16.6	17.3	17.8	17.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.5	±0.6	±0.8
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7	±7	±5	±9
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.7	±0.5	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	15	15	15

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	914.0 N @ 150 km/h (205.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	239.0 N @ 150 km/h (53.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,215.0 N @ 150 km/h (273.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	629.0 N @ 150 km/h (141.4 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
<b>Length, packed</b>	2809 mm   110.591 in

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value

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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



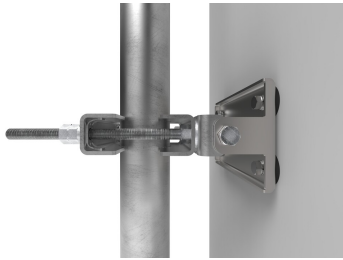
## Included Products

BSAMNT-2F	-	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-2F



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** 3.8 kg | 8.378 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 4 kg | 8.818 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

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