

# RRZZVVS4-65D-R7N43



20-port sector antenna, 4x 694-960, 4x 1427-2690, 4x 1695-2690 MHz, 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 7x RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port
- Antenna shape optimized for wind load reduction
- Retractable tilt indicator rods
- Includes seven Internal RET's
- S4 array uses MLOC cluster connectors

## General Specifications

<b>Antenna Type</b>	Sector and beamforming
<b>Band</b>	Multiband
<b>Calibration Connector Interface</b>	M-LOC
<b>Calibration Connector Quantity</b>	1
<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   M-LOC
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, mid band</b>	8
<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>	High band (1)   Low band (2)   Mid band (4)

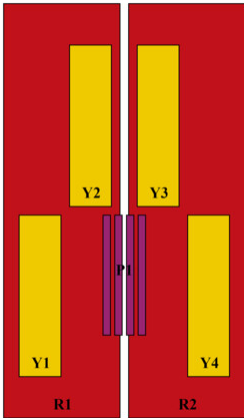
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<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2769 mm   109.016 in
<b>TDD Column Spacing</b>	42 mm   1.654 in

## Array Layout

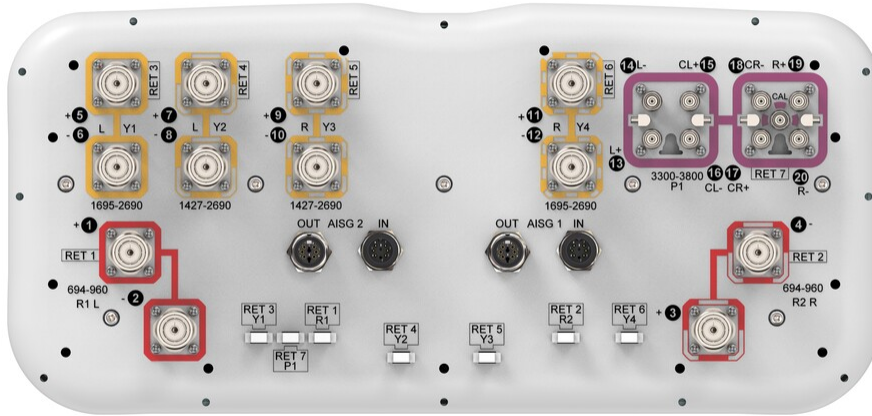


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY4
P1	3300-3800	13 - 20	7	AISG1	CPxxxxxxxxxxxxxxxxP1

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz   3300 – 3800 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1427–1518	1695–2200	2300–2690	1695–2200	2300–2690	3300–3800
<b>Gain, dBi</b>	15.6	16.1	16.4	15.4	17.5	18.3	17.3	18.1	15.8
<b>Beamwidth, Horizontal, degrees</b>	63	55	52	66	61	61	64	62	84
<b>Beamwidth, Vertical, degrees</b>	7.7	6.8	6.3	7.1	5.5	4.4	6	4.9	6.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	19	17	18	15	17	16	21	16
<b>Front-to-Back Ratio at 180°, dB</b>	32	32	32	32	31	31	30	31	27
<b>Coupling level, Amp, Antenna port to Cal port, dB</b>									26
<b>Coupling level, max Amp Δ</b>									±2

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<b>Antenna port to Cal port, dB</b>									
<b>Coupler, max Amp Δ, Antenna port to Cal port, dB</b>									0.9
<b>Coupler, max Phase Δ, Antenna port to Cal port, degrees</b>									7
<b>Isolation, Cross Polarization, dB</b>	27	27	27	26	26	26	27	27	25
<b>Isolation, Inter-band, dB</b>	27	27	27	26	26	26	26	26	25
<b>Isolation, Co-polarization, dB</b>									20
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153	-140
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	150	200	150	75

## Electrical Specifications, Broadcast 65°

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	18.4
<b>Beamwidth, Horizontal, degrees</b>	65
<b>Beamwidth, Vertical, degrees</b>	6.3
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25
<b>USLS (First Lobe), dB</b>	19

## Electrical Specifications, Service Beam

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Steered 0° Gain, dBi</b>	20.9
<b>Steered 0° Beamwidth, Horizontal, degrees</b>	24
<b>Steered 0° Front-to-Back Total Power at 180° ± 30°, dB</b>	28
<b>Steered 0° Horizontal Sidelobe, dB</b>	15
<b>Steered 30° Gain, dBi</b>	19.7
<b>Steered 30° Beamwidth, Horizontal, degrees</b>	29

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**Steered 30° Front-to-Back** 27  
**Total Power at 180° ± 30°, dB**

## Electrical Specifications, Soft Split

<b>Frequency Band, MHz</b>	<b>3300–3800</b>
<b>Gain, dBi</b>	19.8
<b>Beamwidth, Horizontal, degrees</b>	31
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27
<b>Horizontal Sidelobe, dB</b>	18

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	530 mm   20.866 in
<b>Depth, packed</b>	356 mm   14.016 in
<b>Length, packed</b>	2897 mm   114.055 in
<b>Weight, gross</b>	70.6 kg   155.646 lb
<b>Weight, net</b>	49.6 kg   109.349 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

# RRZZVVS4-65D-R7N43

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- 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

