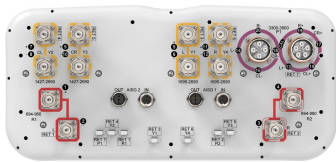


# RRZZVVS4-65BR7NV4



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
- Includes seven Internal RET's
- Retractable tilt indicator rods
- S4 array uses MQ cluster connectors

## General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	MQ5
Calibration Connector Quantity	1
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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female   MQ4   MQ5
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

## Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	2 female   2 male
Input Voltage	10–30 Vdc
Internal RET	High band (1)   Low band (2)   Mid band (4)

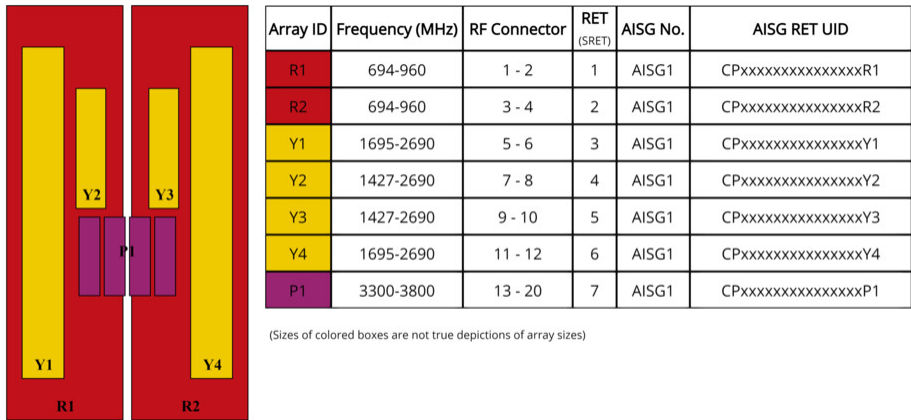
# RRZZVVS4-65BR7NV4

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

## Dimensions

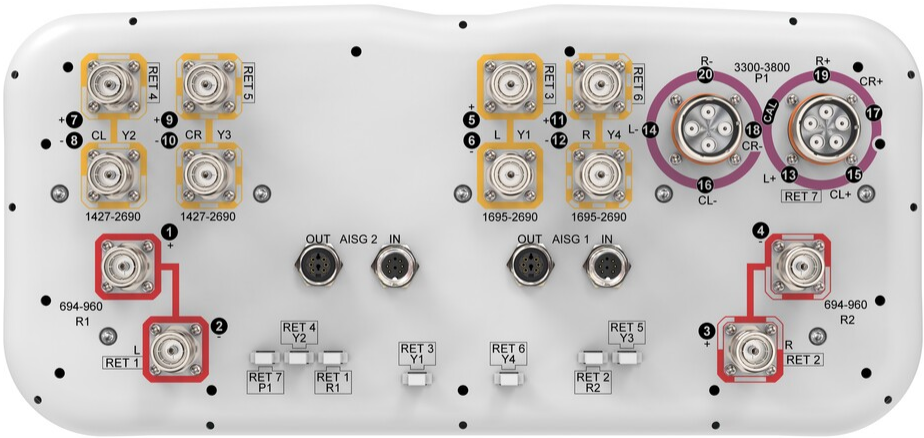
Width	430 mm   16.929 in
Depth	197 mm   7.756 in
Length	2100 mm   82.677 in
TDD Column Spacing	42 mm   1.654 in

## Array Layout



## Port Configuration

# RRZZVVS4-65BR7NV4



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz   1695 – 2690 MHz   3300 – 3800 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,500 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y1,Y4	Y1,Y4	P1
Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–2200	2300–2690	1695–2200	2300–2690	3300–3800
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	7-10	7-10	7-10	5,6,11,12	5,6,11,12	13-20
Gain, dBi	14.3	14.9	15.2	13.8	15.9	16.7	17.6	18.5	15.9
Beamwidth, Horizontal, degrees	72	62	58	67	63	59	69	64	83
Beamwidth, Vertical, degrees	10.7	9.5	8.5	9.8	7.6	6.1	5.2	4.3	6.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	18	15	12	17	22	18	18	16
Front-to-Back Ratio at 180°, dB	31	31	30	34	34	32	34	33	28

# RRZZVVS4-65BR7NV4

Coupling level, Amp, Antenna port to Cal port, dB	26								
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2								
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.9								
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7								
CPR at Boresight, dB	22	21	23	13	18	18	18	20	15
Isolation, Cross Polarization, dB	27	27	27	26	26	26	27	27	25
Isolation, Inter-band, dB	27	27	27	26	26	26	26	26	25
Isolation, Co-polarization, dB	19								
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	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-130
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	150	75

## Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800
Gain, dBi	18.3
Beamwidth, Horizontal, degrees	65
Beamwidth, Vertical, degrees	6.2
Front-to-Back Total Power at 180° ± 30°, dB	26
USLS (First Lobe), dB	20

## Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800
Steered 0° Gain, dBi	20.6
Steered 0° Beamwidth, Horizontal, degrees	23
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29
Steered 0° Horizontal	15

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Sidelobe, dB	
Steered 30° Gain, dBi	19.3
Steered 30° Beamwidth, Horizontal, degrees	29
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	27

## Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800
Gain, dBi	19.5
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	27
Horizontal Sidelobe, dB	17

## Mechanical Specifications

Wind Loading @ Velocity, frontal	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	780.0 N @ 150 km/h (175.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

Width, packed	530 mm   20.866 in
Depth, packed	349 mm   13.74 in
Length, packed	2272 mm   89.449 in
Weight, gross	53.2 kg   117.286 lb
Weight, net	38.2 kg   84.216 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

# RRZZVVS4-65BR7NV4

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## Included Products

- |          |   |   |
|----------|---|---|
| BSAMNT-3 | – | Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.<br>Kit contains one scissor top bracket set and one bottom bracket set. |
|----------|---|---|

## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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# BSAMNT-3



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** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

