

RRVVT4S4-65D-R6



24-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz 65° HPBW, 8x 2300–2690 and 8x 3300–3800MHz, 90° HPBW, 6x RET

- Antenna Includes 1x 4-Column Array for 2300–2690MHz and a separate 1x 4-Column Array for 3300–3800MHz that support 8T8R beamforming operation. Column spacing optimized for Soft Split Beamforming
- Cluster connectors are used for beamforming 4-column arrays with separate calibration port for each band. Six Internal RET's provide independent electrical tilt control for each array
- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1695-2690MHz, suitable for 4x MIMO applications

General Specifications

| | |
|---|--|
| Antenna Type | Sector |
| Band | Multiband |
| Calibration Connector Interface | M-LOC |
| Calibration Connector Quantity | 2 |
| 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 |
| Radiator Material | Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female M-LOC |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 20 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 24 |

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 |

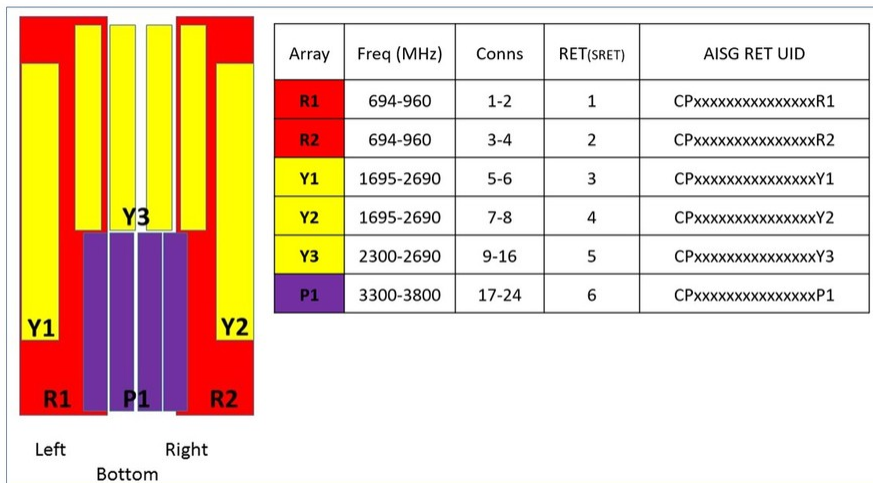
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| | |
|--|------------------------------|
| Internal RET | High band (4) Low band (2) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|---|----------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2688 mm 105.827 in |
| Net Weight, without mounting kit | 56.8 kg 125.222 lb |

Array Layout



Port Configuration

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Electrical Specifications

| | |
|-----------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz 2300 – 2690 MHz 3300 – 3800 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,600 W @ 50 °C |

Electrical Specifications

| | R1-R2 | R1-R2 | R1-R2 | Y1-Y2 | Y1-Y2 | Y3 | P1 |
|--|----------------|----------------|----------------|------------------|------------------|------------------|------------------|
| Frequency Band, MHz | 694-790 | 790-890 | 890-960 | 1695-2200 | 2300-2690 | 2300-2690 | 3300-3800 |
| Gain, dBi | 15.8 | 16.1 | 16.5 | 18.3 | 19.2 | 16 | 15.9 |
| Beamwidth, Horizontal, degrees | 71 | 65 | 62 | 70 | 60 | 93 | 88 |
| Beamwidth, Vertical, degrees | 8.9 | 8 | 7.3 | 5.1 | 4.2 | 4.9 | 6.6 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 14 | 18 | 21 | 14 | 19 | 18 | 16 |
| Front-to-Back Ratio at 180°, dB | 32 | 30 | 29 | 33 | 32 | 32 | 29 |
| Coupling level, Amp, Antenna port to Cal port, dB | | | | | | 26 | 26 |

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| | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|
| Coupling level, max Amp Δ, Antenna port to Cal port, dB | | | | | | ±2 | ±2 |
| Coupler, max Amp Δ, Antenna port to Cal port, dB | | | | | | 0.9 | 0.9 |
| Coupler, max Phase Δ, Antenna port to Cal port, degrees | | | | | | 7 | 9 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 25 | 25 | 20 | 20 |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -145 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 200 | 150 | 75 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1695–2200 | 2300–2690 | 2300–2690 | 3300–3800 |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 15.5 | 15.9 | 16.2 | 17.5 | 18.8 | 15.4 | 15.2 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.4 | ±0.3 | ±0.9 | ±0.6 | ±0.8 | ±1 |
| Gain by Beam Tilt, average, dBi | 2° 15.3 7° 15.6 12° 15.4 | 2° 15.6 7° 15.9 12° 15.8 | 2° 15.9 7° 16.3 12° 16.1 | 2° 17.4 7° 17.7 12° 17.3 | 2° 18.8 7° 19.1 12° 18.5 | 2° 15.3 7° 15.5 12° 15.3 | 2° 14.9 7° 15.3 12° 15.1 |
| Beamwidth, Horizontal Tolerance, degrees | ±6.2 | ±4.0 | ±2.8 | ±6.6 | ±4.4 | ±8.3 | ±22 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.6 | ±0.4 | ±0.6 | ±0.3 | ±0.3 | ±0.6 |
| USLS, beampeak to 20° above beampeak, dB | 14 | 16 | 17 | 14 | 16 | 15 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 22 | 21 | 23 | 26 | 26 | 23 | 22 |
| CPR at Boresight, dB | 21 | 21 | 20 | 20 | 21 | 14 | 16 |
| CPR at Sector, dB | 12 | 8 | 11 | 5 | 5 | 9 | 9 |

Electrical Specifications, Broadcast 65°

| Frequency Band, MHz | 2300–2690 | 3300–3800 |
|---------------------------------------|------------------|------------------|
| Gain, dBi | 17.5 | 16.6 |
| Beamwidth, Horizontal, degrees | 59 | 58 |
| Beamwidth, Vertical, degrees | 4.9 | 6.6 |

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|-----------------------|----|----|
| USLS (First Lobe), dB | 19 | 16 |
|-----------------------|----|----|

Electrical Specifications, Service Beam

| | 2300–2690 | 3300–3800 |
|--|-----------|-----------|
| Frequency Band, MHz | | |
| Steered 0° Gain, dBi | 20.9 | 20.5 |
| Steered 0° Beamwidth, Horizontal, degrees | 26 | 24 |
| Steered 0° Front-to-Back Total Power at 180° ± 30°, dB | 32 | 29 |
| Steered 0° Horizontal Sidelobe, dB | 12 | 13 |
| Steered 30° Gain, dBi | 20.4 | 19.8 |
| Steered 30° Beamwidth, Horizontal, degrees | 28 | 27 |

Electrical Specifications, Soft Split

| | 2300–2690 | 3300–3800 |
|---|-----------|-----------|
| Frequency Band, MHz | | |
| Gain, dBi | 20.2 | 19.7 |
| Beamwidth, Horizontal, degrees | 31 | 30 |
| Front-to-Back Total Power at 180° ± 30°, dB | 33 | 29 |
| Horizontal Sidelobe, dB | 19 | 15 |

Mechanical Specifications

| | |
|----------------------------------|---|
| Mechanical Tilt Range | 0°–12° |
| Wind Loading @ Velocity, frontal | 1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 375.0 N @ 150 km/h (84.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 880.0 N @ 150 km/h (197.8 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|----------------------|
| Width, packed | 565 mm 22.244 in |
| Depth, packed | 309 mm 12.165 in |
| Length, packed | 2935 mm 115.551 in |
| Weight, gross | 77.8 kg 171.519 lb |

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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 |



Included Products

- | | | |
|-----------|---|--|
| 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

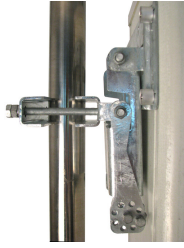
Packaging quantity 1

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 www.commscope.com/ProductCompliance |
| 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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

