

RRZZVVT4S4-65BR8V4



28-port sector antenna, 4x 694-960, 4x 1427-2690 and 4x 1695-2690 MHz 65° HPBW, 8x 2300-2690 and 8x 3300-3800MHz, 90° HPBW, 8x RET

- Also includes 1x 4-Column Array for 2300-2690 MHz and a separate 1x 4-Column Array for 3300-3800MHz. Column spacing optimized to support Soft Split Beamforming
- Includes eight Internal RET's
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- New end cap shape for additional wind load reduction
- 2x MQ4 and 2x MQ5 cluster connectors (comprising 16 RF ports + 2 calibration ports in total) are provided for the beam-forming arrays

General Specifications

| | |
|---|--|
| Antenna Type | Sector and beamforming |
| Band | Multiband |
| Calibration Connector Interface | MQ5 |
| 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 |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female MQ4 MQ5 |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 16 |
| RF Connector Quantity, mid band | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 28 |

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 |

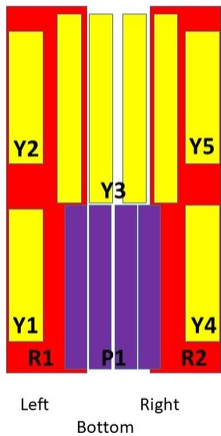
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| | |
|---|---|
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) Low band (2) Mid band (4) |
| Power Consumption, active state, maximum | 8 W |
| Power Consumption, idle state, maximum | 1 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|---|---------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2180 mm 85.827 in |
| Net Weight, without mounting kit | 48 kg 105.822 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 694-960 | 1-2 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3-4 | 2 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1427-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxxxxY2 |
| Y3 | 2300-2690 | 9-16 | 5 | CPxxxxxxxxxxxxxxxxY3 |
| Y4 | 1427-2690 | 17-18 | 6 | CPxxxxxxxxxxxxxxxxY4 |
| Y5 | 1695-2690 | 19-20 | 7 | CPxxxxxxxxxxxxxxxxY5 |
| P1 | 3300-3800 | 21-28 | 8 | CPxxxxxxxxxxxxxxxxP1 |

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

Port Configuration

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Electrical Specifications

| | |
|-----------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1427 – 2690 MHz 1695 – 2690 MHz 2300 – 2690 MHz 3300 – 3800 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,900 W @ 50 °C |

Electrical Specifications

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1427–1518 | 1695–2180 | 2300–2690 | 1695–2180 | 2300–2690 | 2300–2690 | 3300–3800 |
|--|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 15.1 | 15.5 | 15.7 | 14.7 | 16.3 | 17.2 | 15.7 | 16.8 | 15.2 | 16 |
| Beamwidth, Horizontal, degrees | 70 | 63 | 61 | 82 | 68 | 63 | 73 | 58 | 91 | 90 |
| Beamwidth, Vertical, degrees | 10.3 | 9.4 | 8.6 | 10.1 | 7.9 | 5.9 | 8.9 | 7 | 5.6 | 6.1 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 17 | 18 | 20 | 15 | 16 | 17 | 16 | 18 | 17 | 17 |
| Front-to-Back Ratio at 180°, dB | 31 | 29 | 29 | 31 | 29 | 33 | 31 | 30 | 31 | 30 |
| 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 | 7 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Co-polarization, dB | | | | | | | | | | 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 | 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 | -150 | -150 | -150 | -130 | -130 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 250 | 200 | 250 | 200 | 150 | 75 | |

Electrical Specifications, Broadcast 65°

| | | | | | | | | | | | |
|--|----------------------------|--|--|--|--|--|--|--|--|------|-----|
| Frequency Band, MHz | 2300–2690 3300–3800 | | | | | | | | | | |
| Gain, dBi | | | | | | | | | | 17.6 | 18 |
| Beamwidth, Horizontal, degrees | | | | | | | | | | 65 | 65 |
| Beamwidth, Vertical, degrees | | | | | | | | | | 5.7 | 6.3 |
| Front-to-Back Total Power at 180° ± 30°, dB | | | | | | | | | | 27 | 27 |
| USLS (First Lobe), dB | | | | | | | | | | 18 | 21 |

Electrical Specifications, Service Beam

| | | | | | | | | | | | |
|-----------------------------|----------------------------|--|--|--|--|--|--|--|--|------|------|
| Frequency Band, MHz | 2300–2690 3300–3800 | | | | | | | | | | |
| Steered 0° Gain, dBi | | | | | | | | | | 20.3 | 20.8 |
| Steered 0° | | | | | | | | | | 25 | 24 |

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Beamwidth, Horizontal, degrees

Steered 0° Front-to-Back Total Power at 180° ± 30°, dB 31 30

Steered 0° Horizontal Sidelobe, dB 14 13

Steered 30° Gain, dBi 19.3 20.1

Steered 30° Beamwidth, Horizontal, degrees 29 27

Steered 30° Front-to-Back Total Power at 180° ± 30°, dB 28 28

Electrical Specifications, Soft Split

Frequency Band, MHz **2300–2690 3300–3800**

Gain, dBi 19.2 20

Beamwidth, Horizontal, degrees 33 31

Front-to-Back Total Power at 180° ± 30°, dB 30 28

Horizontal Sidelobe, dB 17 17

Mechanical Specifications

Wind Loading @ Velocity, frontal 760.0 N @ 150 km/h (170.9 lbf @ 150 km/h)

Wind Loading @ Velocity, lateral 233.0 N @ 150 km/h (52.4 lbf @ 150 km/h)

Wind Loading @ Velocity, maximum 911.0 N @ 150 km/h (204.8 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 523.0 N @ 150 km/h (117.6 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

Width, packed 565 mm | 22.244 in

Depth, packed 368 mm | 14.488 in

Length, packed 2359 mm | 92.874 in

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Weight, gross 61.9 kg | 136.466 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

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. |
|----------|---|--|

* 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 |

