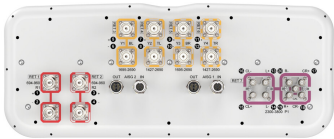


RRZZVVQ4-65B-R7



20-port sector antenna, 4x 694-960 MHz (R1-R2), 4x 1427-2690 MHz (Y2-Y4) and 4x 1695-2690 (Y1-Y3) MHz 65° HPBW, 8x 2300-3800 MHz (P1), 90° HPBW, 7x RET

- Includes 1x 4-Column Array for 2300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Q4 array uses M-LOC cluster connectors
- Seven internal RETs control the antenna arrays
- New aerodynamic endcaps for wind load optimization

General Specifications

| | |
|----------------------------------|--|
| Antenna Type | Sector and beamforming |
| Band | Multiband |
| Calibration Connector Interface | M-LOC |
| 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 M-LOC |
| 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) |

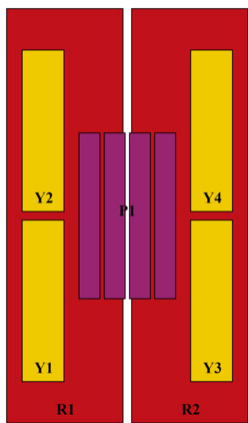
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| | |
|--|----------------------------|
| Power Consumption, active state, maximum | 8 W |
| Power Consumption, idle state, maximum | 1 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|--------------------------|---------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2100 mm 82.677 in |
| Net Weight, antenna only | 40 kg 88.185 lb |

Array Layout

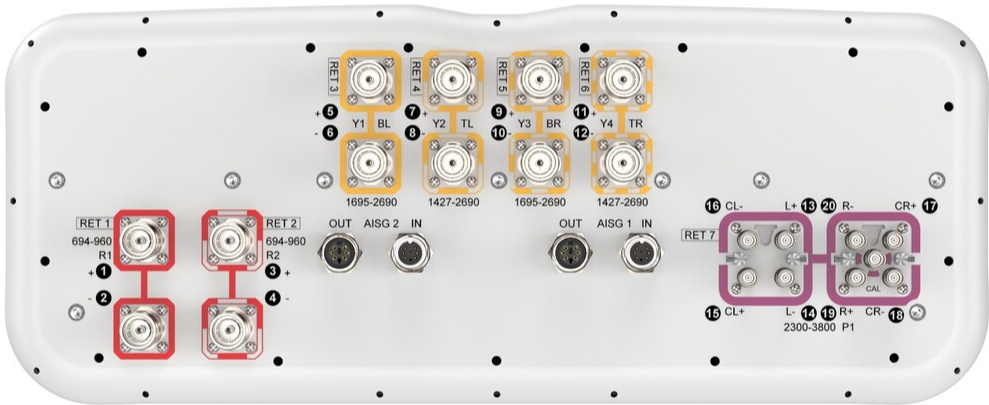


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|---------------|----------|------------------|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxY1 |
| Y2 | 1427-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 9 - 10 | 5 | AISG1 | CPxxxxxxxxxxxxY3 |
| Y4 | 1427-2690 | 11 - 12 | 6 | AISG1 | CPxxxxxxxxxxxxY4 |
| P1 | 2300-3800 | 13 - 20 | 7 | AISG1 | CPxxxxxxxxxxxxP1 |

(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 – 3800 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| | | | | | | | | | | |
|---------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | R1,R2 | R1,R2 | R1,R2 | Y2,Y4 | Y2,Y4 | Y2,Y4 | Y1,Y3 | Y1,Y3 | P1 | P1 |
| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1427–1518 | 1695–2200 | 2300–2690 | 1695–2200 | 2300–2690 | 2300–2690 | 3300–3800 |
| RF Port | 1-4 | 1-4 | 1-4 | 7,8,11,12 | 7,8,11,12 | 7,8,11,12 | 5,6,9,10 | 5,6,9,10 | 13-20 | 13-20 |

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| | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gain at Mid Tilt, dBi | 15 | 15.5 | 15.8 | 14.4 | 16.2 | 17.3 | 15.7 | 17.1 | 15 | 15.8 |
| Beamwidth, Horizontal, degrees | 65 | 61 | 61 | 64 | 56 | 57 | 61 | 58 | 95 | 66 |
| Beamwidth, Vertical, degrees | 10.7 | 9.5 | 8.7 | 9.9 | 7.8 | 6 | 8.6 | 6.9 | 5.8 | 5.5 |
| 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 | 19 | 16 | 15 | 17 | 17 | 20 | 14 | 19 | 15 | 14 |
| Front-to-Back Ratio at 180°, dB | 29 | 28 | 29 | 31 | 29 | 29 | 30 | 28 | 31 | 28 |
| Coupling level, Amp, Antenna port to Cal port, dB | | | | | | | | | 26 | 26 |
| 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 |
| CPR at Boresight, dB | 18 | 18 | 18 | 18 | 20 | 16 | 16 | 17 | 15 | 13 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 25 | 25 | 25 | 25 | 25 | 23 | 23 |
| Isolation, Inter-band, dB | 25 | 25 | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -140 | -140 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 250 | 200 | 250 | 200 | 75 | 75 |

Electrical Specifications, Broadcast 65°

| | |
|---------------------|--------------------|
| Frequency Band, MHz | 2300-26903300-3800 |
| Gain, dBi | 17.517.1 |



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| | | |
|---|-----|-----|
| Beamwidth, Horizontal at 3 dB, degrees | 65 | 65 |
| Beamwidth, Horizontal at 10 dB, degrees | 117 | 108 |
| Beamwidth, Vertical, degrees | 5.8 | 5.5 |
| Front-to-Back Total Power at 180° ± 30°, dB | 28 | 25 |
| USLS (First Lobe), dB | 15 | 14 |

Electrical Specifications, Envelope Pattern

| | | |
|---|--------------------|------|
| Frequency Band, MHz | 2300–26903300–3800 | |
| Gain, dBi | 20.4 | 21.2 |
| Beamwidth, Horizontal at 10 dB, degrees | 126 | 121 |
| Beamwidth, Vertical at 3 dB, degrees | 5.8 | 5.4 |
| Front-to-Back Total Power at 180° ± 30°, dB | 28 | 26 |
| USLS (First Lobe), dB | 16 | 16 |

Electrical Specifications, Service Beam

| | | |
|---|--------------------|------|
| Frequency Band, MHz | 2300–26903300–3800 | |
| Steered 0° Gain, dBi | 20.4 | 21.4 |
| Steered 0° Beamwidth, Horizontal, degrees | 25 | 18 |
| Steered 0° Front-to- Back Total Power at 180° ± 30°, dB | 31 | 29 |
| Steered 0° Horizontal Sidelobe, dB | 13 | 13 |

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| | | |
|--|----|------|
| Steered 30° Gain, dBi | 20 | 18.9 |
| Steered 30° Beamwidth, Horizontal, degrees | 28 | 23 |
| Steered 30° Front- to-Back Total Power at 180° ± 30°, dB | 29 | 25 |

Electrical Specifications, Soft Split

| | | |
|---|-----------|--|
| Frequency Band, MHz | 2300–2690 | |
| Gain, dBi | 19.8 | |
| Beamwidth, Horizontal, degrees | 31 | |
| Front-to-Back Total Power at 180° ± 30°, dB | 29 | |
| Horizontal Sidelobe, dB | 19 | |
| USLS (First Lobe), dB | 17 | |

Mechanical Specifications

| | |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 728.0 N @ 150 km/h (163.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 223.0 N @ 150 km/h (50.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 873.0 N @ 150 km/h (196.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 501.0 N @ 150 km/h (112.6 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|----------------------|
| Width, packed | 565 mm 22.244 in |
| Depth, packed | 309 mm 12.165 in |
| Length, packed | 2287 mm 90.039 in |
| Weight, gross | 54.3 kg 119.711 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |

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

* 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.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

