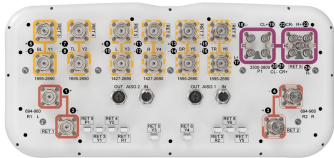


RRZZV4S4-65D-R9N43



24-port sector antenna, 4x 694-960, 4x 1427-2690, 8x 1695-2690 MHz, 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 9x 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 nine internal RET's
- S4 array uses MLOC cluster connectors

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 | 12 |
| 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 |
| Internal RET | High band (1) Low band (2) Mid band (6) |

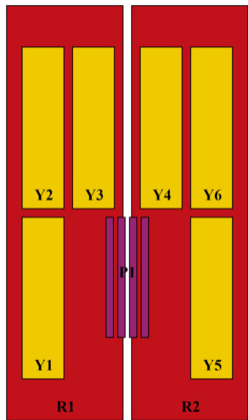
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| | |
|------------------------------------------|----------------------------|
| Power Consumption, active state, maximum | 8 W |
| Power Consumption, idle state, maximum | 1 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|--------------------|----------------------|
| Width | 430 mm 16.929 in |
| Depth | 197 mm 7.756 in |
| Length | 2769 mm 109.016 in |
| TDD Column Spacing | 42 mm 1.654 in |

Array Layout

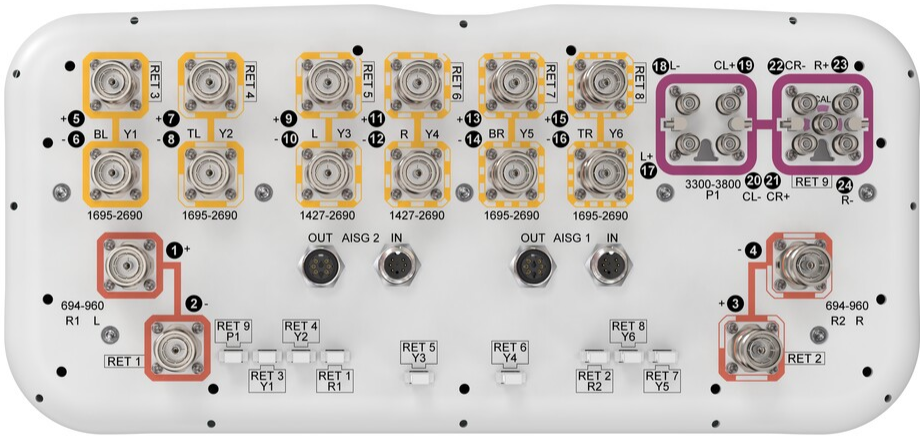


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------------|----------|------------------|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxY2 |
| Y3 | 1427-2690 | 9 - 10 | 5 | AISG1 | CPxxxxxxxxxxxxY3 |
| Y4 | 1427-2690 | 11 - 12 | 6 | AISG1 | CPxxxxxxxxxxxxY4 |
| Y5 | 1695-2690 | 13 - 14 | 7 | AISG1 | CPxxxxxxxxxxxxY5 |
| Y6 | 1695-2690 | 15 - 16 | 8 | AISG1 | CPxxxxxxxxxxxxY6 |
| P1 | 3300-3800 | 17 - 24 | 9 | 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 3300 – 3800 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| | R1,R2 | R1,R2 | R1,R2 | Y3,Y4 | Y3,Y4 | Y3,Y4 | Y1,Y2,Y5,Y6Y1,Y2,Y5,Y6P1 | | |
|--------------------------------|---------|---------|---------|-----------|-----------|-----------|-------------------------------|--|--|
| Frequency Band, MHz | 694-790 | 790-890 | 880-960 | 1427-1518 | 1695-2200 | 2300-2690 | 1695-2200 2300-2690 3300-3800 | | |
| RF Port | 1-4 | 1-4 | 1-4 | 9-12 | 9-12 | 9-12 | 5-8,13-16 5-8,13-16 17-24 | | |
| Gain, dBi | 15.6 | 16.2 | 16.4 | 15.5 | 17.3 | 18.3 | 17.1 17.9 15.8 | | |
| Beamwidth, Horizontal, degrees | 62 | 56 | 53 | 64 | 68 | 59 | 68 61 83 | | |
| Beamwidth, Vertical, degrees | 7.7 | 6.9 | 6.3 | 7 | 5.5 | 4.4 | 6.1 4.9 6.3 | | |
| 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 | 15 | 16 | 16 | 18 | 17 | 19 | 15 18 16 | | |

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| | | | | | | | | | |
|---------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Front-to-Back Ratio at 180°, dB | 34 | 33 | 31 | 32 | 32 | 32 | 30 | 32 | 28 |
| 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 |
| Isolation, Cross Polarization, dB | 27 | 27 | 27 | 26 | 26 | 26 | 27 | 27 | 25 |
| Isolation, Inter-band, dB | 27 | 27 | 27 | 25 | 26 | 26 | 27 | 27 | 25 |
| Isolation, Co-polarization, dB | | | | | | | | | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -140 |
| 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 |
| Beamwidth, Horizontal, degrees | 65 |
| Beamwidth, Vertical, degrees | 6.3 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 |
| USLS (First Lobe), dB | 20 |

Electrical Specifications, Service Beam

| | |
|--------------------------------------------------------|-----------|
| Frequency Band, MHz | 3300–3800 |
| Steered 0° Gain, dBi | 20.8 |
| Steered 0° Beamwidth, Horizontal, degrees | 24 |
| Steered 0° Front-to-Back Total Power at 180° ± 30°, dB | 29 |

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| | |
|---------------------------------------------------------|------|
| Steered 0° Horizontal Sidelobe, dB | 15 |
| Steered 30° Gain, dBi | 19.6 |
| 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 | 19.7 |
| Beamwidth, Horizontal, degrees | 31 |
| Front-to-Back Total Power at 180° ± 30°, dB | 27 |
| Horizontal Sidelobe, dB | 18 |

Mechanical Specifications

| | |
|----------------------------------|---------------------------------------------|
| Wind Loading @ Velocity, frontal | 651.0 N @ 150 km/h (146.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 351.0 N @ 150 km/h (78.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,028.0 N @ 150 km/h (231.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 421.0 N @ 150 km/h (94.6 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|----------------------|
| Width, packed | 530 mm 20.866 in |
| Depth, packed | 356 mm 14.016 in |
| Length, packed | 2897 mm 114.055 in |
| Weight, gross | 75 kg 165.347 lb |
| Weight, net | 53.8 kg 118.609 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 |

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

