

RRZZ-33D-R4



8-port multiband sector antenna, 4x 694-960 and 4 x 1427-2690 MHz, 33° HPBW, 4x RET

- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

General Specifications

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|--|--|
| Antenna Type | Sector |
| Band | Multiband |
| 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 |
| RF Connector Location | Bottom |
| RF Connector Quantity, mid band | 4 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 8 |

Remote Electrical Tilt (RET) Information

| | |
|---|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | Low band (2) Mid band (2) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

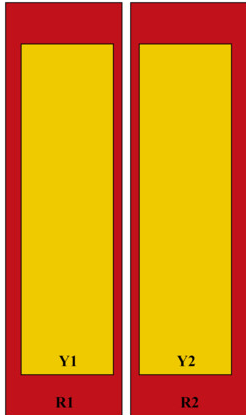
Dimensions

| | |
|--------------|--------------------|
| Width | 749 mm 29.488 in |
|--------------|--------------------|

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|---|----------------------|
| Depth | 197 mm 7.756 in |
| Length | 2688 mm 105.827 in |
| Net Weight, without mounting kit | 67 kg 147.71 lb |

Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------------|----------|----------------------|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1427-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1427-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxxxxxY2 |

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

Port Configuration



Electrical Specifications

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

Electrical Specifications

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1427–1518 | 1695–1920 | 1920–2180 | 2300–2490 | 2490–2690 |
|---------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 17.4 | 18.2 | 18.7 | 19.2 | 20.6 | 21.7 | 22.3 | 22 |

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| | | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| Beamwidth, Horizontal, degrees | 36 | 32 | 30 | 36 | 29 | 26 | 24 | 21 |
| Beamwidth, Vertical, degrees | 8 | 7.2 | 6.6 | 7.1 | 5.9 | 5.3 | 4.7 | 4.4 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 15 | 17 | 17 | 19 | 18 | 20 | 21 | 19 |
| Front-to-Back Ratio at 180°, dB | 30 | 35 | 36 | 37 | 39 | 40 | 37 | 35 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 200 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 694-790 | 790-890 | 890-960 | 1427-1518 | 1695-1920 | 1920-2180 | 2300-2490 | 2490-2690 |
|--|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi | 17 | 17.9 | 18.5 | 18.9 | 20.3 | 21.3 | 21.9 | 21.4 |
| Gain by all Beam Tilts Tolerance, dB | ±0.8 | ±0.4 | ±0.4 | ±0.6 | ±0.6 | ±0.6 | ±0.5 | ±0.6 |
| Beamwidth, Horizontal Tolerance, degrees | ±3.4 | ±1.7 | ±1.6 | ±1.6 | ±2 | ±2.1 | ±0.9 | ±1.8 |
| Beamwidth, Vertical Tolerance, degrees | ±0.5 | ±0.4 | ±0.2 | ±0.3 | ±0.4 | ±0.3 | ±0.2 | ±0.3 |
| USLS, beampeak to 20° above beampeak, dB | 14 | 15 | 16 | 16 | 18 | 20 | 20 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 22 | 27 | 27 | 31 | 34 | 32 | 32 | 30 |
| CPR at Boresight, dB | 21 | 21 | 24 | 18 | 20 | 19 | 18 | 18 |
| CPR at 10 dB Horizontal Beamwidth, dB | 8 | 13 | 10 | 8 | 12 | 10 | 11 | 8 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 304.0 N @ 150 km/h (68.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

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Packaging and Weights

| | |
|-----------------------|----------------------|
| Width, packed | 910 mm 35.827 in |
| Depth, packed | 368 mm 14.488 in |
| Length, packed | 2921 mm 115 in |
| Weight, gross | 93.6 kg 206.352 lb |
| Weight, net | 67 kg 147.71 lb |

Regulatory Compliance/Certifications

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



Included Products

| | | |
|-------------|---|---|
| BSAMNT-4-F3 | - | Wide Profile Antenna Fixed Tilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. |
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* Footnotes

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|-------------------------|---|
| Performance Note | Severe environmental conditions may degrade optimum performance |
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