# RR-65B-R2

### 4-port sector antenna, 4x 694–960 MHz, 65° HPBW, 2x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

## General Specifications

| | |
|---|---|
| **Antenna Type** | Sector |
| **Band** | Single band |
| **Grounding Type** | RF connector inner conductor and body grounded to reflector and mounting bracket |
| **Performance Note** | Outdoor usage   \|   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| **RF Connector Interface** | 4.3-10 Female |
| **RF Connector Location** | Bottom |
| **RF Connector Quantity, high band** | 0 |
| **RF Connector Quantity, mid band** | 0 |
| **RF Connector Quantity, low band** | 4 |
| **RF Connector Quantity, total** | 4 |

## 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) |
| **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** | 1828 mm   \|   71.969 in |

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| **Net Weight, antenna only** | 33 kg  |  72.752 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 |

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

Left    Right
   Bottom

## Port Configuration



## Electrical Specifications

| **Impedance** | 50 ohm |

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

## Electrical Specifications

| | R1,R2 | R1,R2 | R1,R2 |
|---|---|---|---|
| **Frequency Band, MHz** | **694–790** | **790–890** | **890–960** |
| **RF Port** | 1-4 | 1-4 | 1-4 |
| **Gain at Mid Tilt, dBi** | 14.2 | 14.7 | 15.4 |
| **Beamwidth, Horizontal, degrees** | 67 | 64 | 58 |
| **Beamwidth, Vertical, degrees** | 12.1 | 10.8 | 10.1 |
| **Beam Tilt, degrees** | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 19 | 21 | 24 |
| **Front-to-Back Ratio at 180°, dB** | 31 | 33 | 29 |
| **Front-to-Back Total Power at 180° ± 30°, dB** | 21 | 21 | 22 |
| **Isolation, Cross Polarization, dB** | 25 | 25 | 25 |
| **Isolation, Inter-band, dB** | 25 | 25 | 25 |
| **VSWR | Return loss, dB** | 1.5 | 14.0 | 1.5 | 14.0 | 1.5 | 14.0 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -153 | -153 | -153 |
| **Input Power per Port at 50°C, maximum, watts** | 300 | 300 | 300 |

## Mechanical Specifications

| | |
|---|---|
| **Wind Loading @ Velocity, frontal** | 711.0 N @ 150 km/h (159.8 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 229.0 N @ 150 km/h (51.5 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, maximum** | 998.0 N @ 150 km/h (224.4 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, rear** | 563.0 N @ 150 km/h (126.6 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** | 2015 mm  |  79.331 in |
| **Weight, gross** | 46.7 kg  |  102.956 lb |

## Regulatory Compliance/Certifications

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| 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-3 | – | 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 |
|---|---|