

# EGRZZHHTT-65A-R8



18-port sector antenna, 2x 694–862, 2x 880–960, 2x 694–960, 4x 1427–2690, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 8x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Antenna shape optimized for wind load reduction

## General Specifications

|   |  |
|---|--|
| <b>Antenna Type</b>                     | Sector   |
| <b>Band</b>                             | Multiband  |
| <b>Color</b>                            | Light Gray (RAL 7035)  |
| <b>Grounding Type</b>                   | RF connector inner conductor and body grounded to reflector and mounting bracket |
| <b>Performance Note</b>                 | Outdoor usage  |
| <b>Radome Material</b>                  | Fiberglass, UV resistant   |
| <b>Reflector Material</b>               | Aluminum   |
| <b>RF Connector Interface</b>           | 4.3-10 Female  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 0  |
| <b>RF Connector Quantity, mid band</b>  | 12   |
| <b>RF Connector Quantity, low band</b>  | 6  |
| <b>RF Connector Quantity, total</b>     | 18   |

## Remote Electrical Tilt (RET) Information

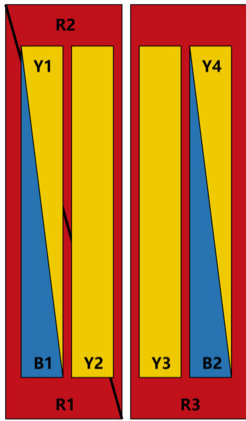
|   |                                   |
|---|-----------------------------------|
| <b>RET Hardware</b>                             | CommRET v2                        |
| <b>RET Interface</b>                            | 8-pin DIN Female   8-pin DIN Male |
| <b>RET Interface, quantity</b>                  | 2 female   2 male                 |
| <b>Input Voltage</b>                            | 10–30 Vdc                         |
| <b>Internal RET</b>                             | Low band (3)   Mid band (5)       |
| <b>Power Consumption, active state, maximum</b> | 8 W                               |
| <b>Power Consumption, idle state, maximum</b>   | 1 W                               |
| <b>Protocol</b>                                 | 3GPP/AISG 2.0 (Single RET)        |

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## Dimensions

|                                 |                     |
|---------------------------------|---------------------|
| <b>Width</b>                    | 498 mm   19.606 in  |
| <b>Depth</b>                    | 197 mm   7.756 in   |
| <b>Length</b>                   | 1600 mm   62.992 in |
| <b>Net Weight, antenna only</b> | 40.4 kg   89.067 lb |

## Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID     |
|----------|-----------------|--------------|------------|----------|------------------|
| R1       | 694-862         | 1 - 2        | 1          | AISG1    | CPXXXXXXXXXXXXR1 |
| R2       | 880-960         | 3 - 4        | 2          | AISG1    | CPXXXXXXXXXXXXR2 |
| R3       | 694-960         | 5 - 6        | 3          | AISG1    | CPXXXXXXXXXXXXR3 |
| B1       | 1695-2180       | 7 - 8        | 4          | AISG1    | CPXXXXXXXXXXXXB1 |
| B2       | 1695-2180       | 9 - 10       | 5          | AISG1    | CPXXXXXXXXXXXXB2 |
| Y1       | 2490-2690       | 11 - 12      | 6          | AISG1    | CPXXXXXXXXXXXXY1 |
| Y4       | 2490-2690       | 17 - 18      |            |          |                  |
| Y2       | 1427-2690       | 13 - 14      | 7          | AISG1    | CPXXXXXXXXXXXXY2 |
| Y3       | 1427-2690       | 15 - 16      | 8          | AISG1    | CPXXXXXXXXXXXXY3 |

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

## Port Configuration



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## Electrical Specifications

|                                   |   |
|-----------------------------------|---|
| <b>Impedance</b>                  | 50 ohm  |
| <b>Operating Frequency Band</b>   | 1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   694 – 862 MHz   694 – 960 MHz   880 – 960 MHz |
| <b>Polarization</b>               | ±45°  |
| <b>Total Input Power, maximum</b> | 900 W @ 50 °C   |

## Electrical Specifications

|   | <b>R1</b>      | <b>R1</b>      | <b>R2</b>      | <b>R3</b>      | <b>R3</b>      | <b>R3</b>      |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Frequency Band, MHz</b>                          | <b>698–806</b> | <b>790–862</b> | <b>880–960</b> | <b>698–806</b> | <b>790–894</b> | <b>890–960</b> |
| <b>RF Port</b>                                      | 1,2            | 1,2            | 3,4            | 5,6            | 5,6            | 5,6            |
| <b>Gain at Mid Tilt, dBi</b>                        | 13.4           | 13.6           | 13.8           | 13.9           | 14.3           | 14.4           |
| <b>Beamwidth, Horizontal, degrees</b>               | 71             | 67             | 65             | 71             | 67             | 65             |
| <b>Beamwidth, Vertical, degrees</b>                 | 13.5           | 12.7           | 11.7           | 13.8           | 12.7           | 11.6           |
| <b>Beam Tilt, degrees</b>                           | 3–16           | 3–16           | 3–16           | 3–16           | 3–16           | 3–16           |
| <b>USLS (First Lobe), dB</b>                        | 16             | 15             | 13             | 16             | 17             | 16             |
| <b>Front-to-Back Ratio at 180°, dB</b>              | 30             | 30             | 28             | 30             | 27             | 28             |
| <b>Front-to-Back Total Power at 180° ± 30°, dB</b>  | 20             | 20             | 20             | 19             | 20             | 21             |
| <b>Isolation, Cross Polarization, dB</b>            | 25             | 25             | 25             | 25             | 25             | 25             |
| <b>Isolation, Inter-band, dB</b>                    | 25             | 25             | 25             | 25             | 25             | 25             |
| <b>VSWR   Return loss, dB</b>                       | 1.5 14.0       | 1.5 14.0       | 1.5 14.0       | 1.5 14.0       | 1.5 14.0       | 1.5 14.0       |
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -150           | -150           | -150           | -150           | -150           | -150           |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 300            | 300            | 300            | 300            | 300            | 300            |

## Electrical Specifications

|                                       | <b>B1,B2</b>     | <b>B1,B2</b>     | <b>Y1,Y4</b>     | <b>Y2,Y3</b>     | <b>Y2,Y3</b>     | <b>Y2,Y3</b>     | <b>Y2,Y3</b>     | <b>Y2,Y3</b>     |
|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Frequency Band, MHz</b>            | <b>1695–1995</b> | <b>1920–2180</b> | <b>2490–2690</b> | <b>1427–1518</b> | <b>1695–1995</b> | <b>1920–2300</b> | <b>2300–2500</b> | <b>2490–2690</b> |
| <b>RF Port</b>                        | 7-10             | 7-10             | 11,12,17,18      | 13-16            | 13-16            | 13-16            | 13-16            | 13-16            |
| <b>Gain at Mid Tilt, dBi</b>          | 16.7             | 17.5             | 17.8             | 15.4             | 16.9             | 17.7             | 18.2             | 18.1             |
| <b>Beamwidth, Horizontal, degrees</b> | 69               | 63               | 56               | 73               | 64               | 60               | 58               | 57               |
| <b>Beamwidth, Vertical, degrees</b>   | 6.1              | 5.6              | 4.6              | 8                | 6.4              | 5.7              | 4.9              | 4.6              |

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|   |          |          |          |          |          |          |          |          |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>Beam Tilt, degrees</b>                           | 2-12     | 2-12     | 2-12     | 2-12     | 2-12     | 2-12     | 2-12     | 2-12     |
| <b>USLS (First Lobe), dB</b>                        | 16       | 16       | 17       | 17       | 16       | 16       | 16       | 16       |
| <b>Front-to-Back Ratio at 180°, dB</b>              | 32       | 31       | 31       | 31       | 32       | 32       | 31       | 30       |
| <b>Front-to-Back Total Power at 180° ± 30°, dB</b>  | 26       | 25       | 26       | 24       | 26       | 26       | 26       | 26       |
| <b>Isolation, Cross Polarization, dB</b>            | 25       | 25       | 25       | 25       | 25       | 25       | 25       | 25       |
| <b>Isolation, Inter-band, dB</b>                    | 25       | 25       | 25       | 25       | 25       | 25       | 25       | 25       |
| <b>VSWR   Return loss, dB</b>                       | 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 |
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -150     | -150     | -150     | -150     | -150     | -150     | -150     | -150     |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 250      | 250      | 150      | 250      | 250      | 250      | 200      | 200      |

## Mechanical Specifications

|   |   |
|---|---|
| <b>Wind Loading @ Velocity, frontal</b> | 544.0 N @ 150 km/h (122.3 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, lateral</b> | 142.0 N @ 150 km/h (31.9 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, maximum</b> | 723.0 N @ 150 km/h (162.5 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 374.0 N @ 150 km/h (84.1 lbf @ 150 km/h)  |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                       |                     |
|-----------------------|---------------------|
| <b>Width, packed</b>  | 565 mm   22.244 in  |
| <b>Depth, packed</b>  | 368 mm   14.488 in  |
| <b>Length, packed</b> | 1775 mm   69.882 in |
| <b>Weight, gross</b>  | 54.2 kg   119.49 lb |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |



# EGRZZHHTT-65A-R8

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## 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |

