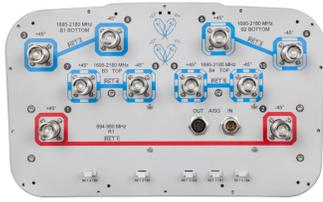


# R2HH-6533D-R5



10-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW and 8x 1695–2180 MHz 4x 33°HPBW, 5x RET with tilt indicators

- 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
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

## General Specifications

|   |  |
|---|--|
| <b>Antenna Type</b>                     | Sector   |
| <b>Band</b>                             | Multiband  |
| <b>Grounding Type</b>                   | RF connector inner conductor and body grounded to reflector and mounting bracket                                     |
| <b>Performance Note</b>                 | Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| <b>Radome Material</b>                  | Fiberglass, UV resistant   |
| <b>Radiator Material</b>                | Copper   Low loss circuit board  |
| <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> | 8  |
| <b>RF Connector Quantity, mid band</b>  | 0  |
| <b>RF Connector Quantity, low band</b>  | 2  |
| <b>RF Connector Quantity, total</b>     | 10   |

## Remote Electrical Tilt (RET) Information

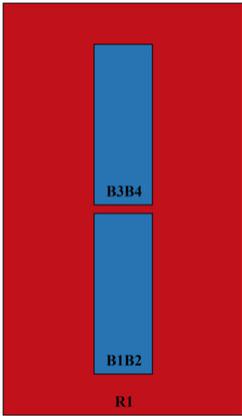
|  |                                   |
|--|-----------------------------------|
| <b>RET Hardware</b>                                  | CommRET v2                        |
| <b>RET Interface</b>                                 | 8-pin DIN Female   8-pin DIN Male |
| <b>RET Interface, quantity</b>                       | 1 female   1 male                 |
| <b>Input Voltage</b>                                 | 10–30 Vdc                         |
| <b>Internal RET</b>                                  | High band (4)   Low band (1)      |
| <b>Power Consumption, idle state, maximum</b>        | 1 W                               |
| <b>Power Consumption, normal conditions, maximum</b> | 8 W                               |
| <b>Protocol</b>                                      | 3GPP/AISG 2.0 (Single RET)        |

# R2HH-6533D-R5

## Dimensions

|   |                      |
|---|----------------------|
| <b>Width</b>                            | 350 mm   13.78 in    |
| <b>Depth</b>                            | 208 mm   8.189 in    |
| <b>Length</b>                           | 2688 mm   105.827 in |
| <b>Net Weight, without mounting kit</b> | 35 kg   77.162 lb    |

## Array Layout



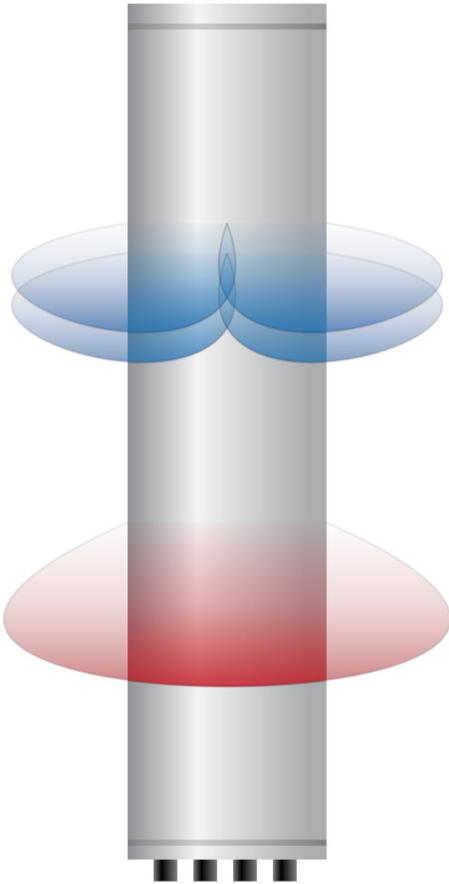
| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID         |
|----------|-----------------|--------------|------------|----------|----------------------|
| R1       | 694-960         | 1 - 2        | 1          | AISG1    | CPxxxxxxxxxxxxxxxxR1 |
| B1       | 1695-2180       | 3 - 4        | 2          | AISG1    | CPxxxxxxxxxxxxxxxxB1 |
| B2       | 1695-2180       | 5 - 6        | 3          | AISG1    | CPxxxxxxxxxxxxxxxxB2 |
| B3       | 1695-2180       | 7 - 8        | 4          | AISG1    | CPxxxxxxxxxxxxxxxxB3 |
| B4       | 1695-2180       | 9 - 10       | 5          | AISG1    | CPxxxxxxxxxxxxxxxxB4 |

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

## Beams Configuration

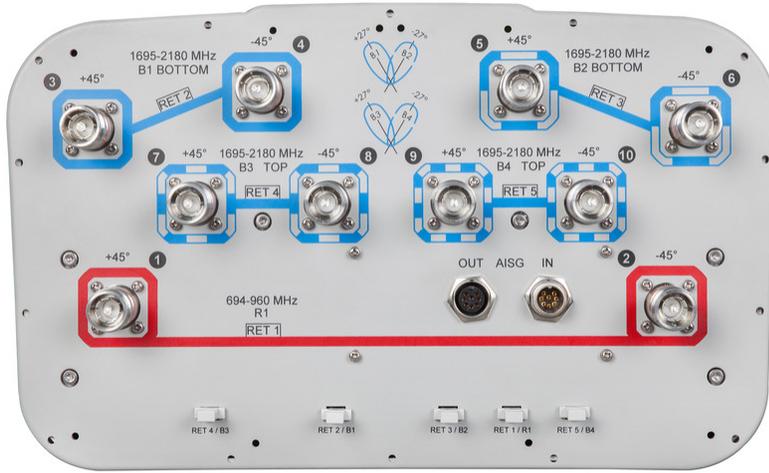
# R2HH-6533D-R5

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Port Configuration

# R2HH-6533D-R5



## Electrical Specifications

|                                   |                                 |
|-----------------------------------|---------------------------------|
| <b>Impedance</b>                  | 50 ohm                          |
| <b>Operating Frequency Band</b>   | 1695 – 2180 MHz   694 – 960 MHz |
| <b>Polarization</b>               | ±45°                            |
| <b>Total Input Power, maximum</b> | 1,000 W @ 50 °C                 |

## Electrical Specifications

| Frequency Band, MHz                      | 694–790 | 790–890 | 880–960 | 1695–1880 | 1850–1990 | 1920–2180 |
|--|---------|---------|---------|-----------|-----------|-----------|
| <b>Gain, dBi</b>                         | 16.4    | 16.9    | 16.9    | 18.4      | 19.3      | 19.8      |
| <b>Beam Centers, Horizontal, degrees</b> |         |         |         | ±27       | ±27       | ±27       |
| <b>Beamwidth, Horizontal, degrees</b>    | 68      | 65      | 65      | 33        | 31        | 31        |
| <b>Beamwidth, Vertical, degrees</b>      | 8.9     | 8       | 7.4     | 7.2       | 6.8       | 6.4       |
| <b>Beam Tilt, degrees</b>                | 2–12    | 2–12    | 2–12    | 2–12      | 2–12      | 2–12      |
| <b>USLS (First Lobe), dB</b>             | 17      | 20      | 19      | 16        | 16        | 17        |
| <b>Front-to-Back Ratio at 180°, dB</b>   | 32      | 34      | 34      | 28        | 34        | 36        |
| <b>Isolation, Cross Polarization, dB</b> | 28      | 28      | 28      | 25        | 25        | 25        |

# R2HH-6533D-R5

|   |             |             |             |             |             |             |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Isolation, Inter-band, dB</b>                    | 30          | 30          | 30          | 30          | 30          | 30          |
| <b>Isolation, Beam to Beam, dB</b>                  |             |             |             | 17          | 17          | 17          |
| <b>VSWR   Return loss, dB</b>                       | 1.46   14.5 | 1.46   14.5 | 1.46   14.5 | 1.46   14.5 | 1.46   14.5 | 1.46   14.5 |
| <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         | 250         | 250         | 250         |

## Mechanical Specifications

|   |   |
|---|---|
| <b>Wind Loading @ Velocity, frontal</b> | 477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)   |
| <b>Wind Loading @ Velocity, lateral</b> | 409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)    |
| <b>Wind Loading @ Velocity, maximum</b> | 1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)   |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                          |

## Packaging and Weights

|                       |                      |
|-----------------------|----------------------|
| <b>Width, packed</b>  | 460 mm   18.11 in    |
| <b>Depth, packed</b>  | 350 mm   13.78 in    |
| <b>Length, packed</b> | 2830 mm   111.417 in |
| <b>Weight, gross</b>  | 50 kg   110.231 lb   |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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-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

|                         |   |
|-------------------------|---|
| <b>Performance Note</b> | 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  |

