

# RR-65D-R2N43



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Excellent wind loading characteristics

This product will be discontinued on: December 31, 2025

## General Specifications

|                                  |                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------|
| Antenna Type                     | Sector                                                                           |
| Band                             | Single band                                                                      |
| 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                                                         |
| Radiator Material                | Low loss circuit board                                                           |
| Reflector Material               | Aluminum                                                                         |
| 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                  | 2 female   2 male                 |
| Input Voltage                            | 10–30 Vdc                         |
| Internal RET                             | Low band (2)                      |
| Power Consumption, active state, maximum | 8 W                               |

# RR-65D-R2N43

|                                        |                            |
|----------------------------------------|----------------------------|
| 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 |
| Net Weight, antenna only | 37.7 kg   83.114 lb  |

## Array Layout

| <div><div>R1</div><div>R2</div></div> | Array | Freq (MHz)                                                      | Conns | RET<br>(SRET) | AISG RET UID         |
|---------------------------------------|-------|-----------------------------------------------------------------|-------|---------------|----------------------|
|                                       | R1    | 694-960                                                         | 1-2   | 1             | CPxxxxxxxxxxxxxxxxR1 |
|                                       | R2    | 694-960                                                         | 3-4   | 2             | CPxxxxxxxxxxxxxxxxR2 |
|                                       |       |                                                                 |       |               |                      |
|                                       |       |                                                                 |       |               |                      |
|                                       |       |                                                                 |       |               |                      |
| Left<br>Bottom                        | Right | (Sizes of colored boxes are not true depictions of array sizes) |       |               |                      |

## Port Configuration

# RR-65D-R2N43



## Electrical Specifications

|                            |               |
|----------------------------|---------------|
| Impedance                  | 50 ohm        |
| Operating Frequency Band   | 694 – 960 MHz |
| Polarization               | ±45°          |
| Total Input Power, maximum | 700 W @ 50 °C |

## Electrical Specifications

|                                 | R1,R2   | R1,R2   | R1,R2   |
|---------------------------------|---------|---------|---------|
| Frequency Band, MHz             | 694–790 | 790–890 | 890–960 |
| RF Port                         | 1,2,3,4 | 1,2,3,4 | 1,2,3,4 |
| Gain, dBi                       | 15.7    | 16.2    | 16.8    |
| Beamwidth, Horizontal, degrees  | 62      | 56      | 55      |
| Beamwidth, Vertical, degrees    | 7.7     | 6.9     | 6.3     |
| Beam Tilt, degrees              | 2–12    | 2–12    | 2–12    |
| USLS (First Lobe), dB           | 15      | 17      | 16      |
| Front-to-Back Ratio at 180°, dB | 32      | 33      | 29      |
| CPR at Boresight, dB            | 25      | 24      | 22      |

# RR-65D-R2N43

|                                              |            |            |            |
|----------------------------------------------|------------|------------|------------|
| Isolation, Cross Polarization, dB            | 27         | 27         | 27         |
| Isolation, Inter-band, dB                    | 27         | 27         | 27         |
| 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 | 250        | 250        | 250        |

## 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  | 57.9 kg   127.647 lb |

## 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.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant                                                                                                                      |
| UK-ROHS       | Compliant                                                                                                                      |



## 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.                            |

# RR-65D-R2N43

---

\* Footnotes

**Performance Note**      Severe environmental conditions may degrade optimum performance