

RRVV-65D-R4-V2



8-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 4x RET, includes retractable tilt rods

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

OBSOLETE

This product was discontinued on: November 30, 2023

Replaced By:

8P-4L4M-D4

8-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 4x RET

General Specifications

| | |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Antenna Type | Sector |
| Band | Multiband |
| 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 |
| 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 | 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 | 2 female 2 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) Low band (2) |

RRVV-65D-R4-V2

| | |
|------------------------------------------------------|----------------------------|
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|-----------------------------------------|----------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2688 mm 105.827 in |
| Net Weight, without mounting kit | 48.8 kg 107.585 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 |
| Y1 | 1695-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxxxxY2 |

Left Right
Bottom

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

Port Configuration

RRVV-65D-R4-V2



Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 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 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2500 | 2500–2690 |
|------------------------------------------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 15.7 | 16.4 | 16.9 | 18.5 | 18.9 | 19.1 | 19.2 | 18.8 |
| Beamwidth, Horizontal, degrees | 70 | 67 | 62 | 59 | 59 | 61 | 64 | 70 |
| Beamwidth, Vertical, degrees | 8.2 | 7.4 | 6.9 | 5.4 | 5.1 | 4.8 | 4.2 | 4 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 12 | 16 | 19 | 22 | 23 | 22 | 21 | 19 |
| Front-to-Back Ratio at 180°, dB | 32 | 32 | 32 | 36 | 37 | 32 | 35 | 31 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| 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 |

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| | | | | | | | | |
|-----------------------------------------------------|------|------|------|------|------|------|------|------|
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 250 | 250 | 250 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2500 | 2500–2690 |
|----------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 15.6 | 16.1 | 16.7 | 18 | 18.7 | 18.8 | 18.9 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.5 | ±0.4 | ±0.8 | ±0.4 | ±0.4 | ±0.5 | ±0.5 |
| Gain by Beam Tilt, average, dBi | 2° 15.5 7° 15.7 12° 15.5 | 2° 16.1 7° 16.2 12° 15.9 | 2° 16.7 7° 16.8 12° 16.4 | 2° 17.9 7° 18.2 12° 17.9 | 2° 18.5 7° 18.8 12° 18.5 | 2° 18.6 7° 19.0 12° 18.7 | 2° 18.7 7° 19.0 12° 18.7 | 2° 18.1 7° 18.6 12° 18.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±4.9 | ±2.5 | ±4.1 | ±4.3 | ±2.3 | ±3 | ±6.5 | ±4.8 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.6 | ±0.4 | ±0.3 | ±0.2 | ±0.3 | ±0.2 | ±0.1 |
| USLS, beampeak to 20° above beampeak, dB | 12 | 15 | 17 | 15 | 18 | 18 | 17 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 21 | 21 | 23 | 29 | 31 | 29 | 28 | 27 |
| CPR at Boresight, dB | 24 | 24 | 25 | 20 | 21 | 21 | 17 | 15 |
| CPR at Sector, dB | 9 | 7 | 8 | 9 | 9 | 8 | 7 | 6 |

Mechanical Specifications

| | |
|-----------------------------------------|---------------------------------------------|
| Mechanical Tilt Range | 0°–12° |
| Wind Loading @ Velocity, frontal | 1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 375.0 N @ 150 km/h (84.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 880.0 N @ 150 km/h (197.8 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 | 2935 mm 115.551 in |
| Weight, gross | 69.8 kg 153.882 lb |

Regulatory Compliance/Certifications

RRVV-65D-R4-V2

Agency

CHINA-ROHS

ISO 9001:2015

ROHS

UK-ROHS



Classification

Above maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant/Exempted

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. |
| 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. |

* 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

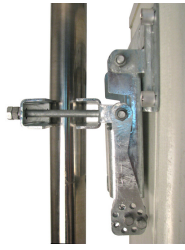
Packaging quantity 1

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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



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.

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 4.6 kg | 10.141 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 |
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| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
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