

FFVV-65B-R3-V1



8-port sector antenna, 4x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

- Meets -153dBc 3rd order PIM for 1695-2690MHz, using 2x40W carriers

General Specifications

| | |
|---|--|
| Antenna Type | Sector |
| Band | Multiband |
| 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 | 4 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 8 |

Remote Electrical Tilt (RET) Information

| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 10 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|--------------|--------------------|
| Width | 640 mm 25.197 in |
|--------------|--------------------|

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|---|---------------------|
| Depth | 235 mm 9.252 in |
| Length | 1828 mm 71.969 in |
| Net Weight, without mounting kit | 45.5 kg 100.31 lb |

Array Layout

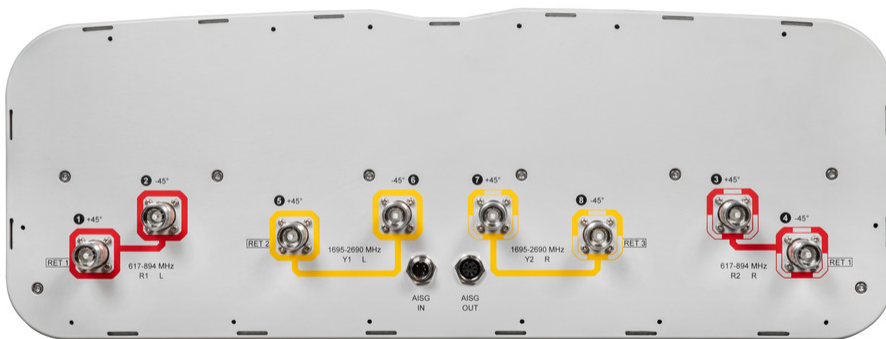


| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 617-894 | 1-2 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 617-894 | 3-4 | | |
| Y1 | 1695-2690 | 5-6 | 2 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7-8 | 3 | CPxxxxxxxxxxxxxxxxY2 |

Left Bottom Right

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

Port Configuration



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Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz 617 – 894 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| Frequency Band, MHz | 617–698 | 698–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2500 | 2500–2690 |
|---|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 14.3 | 15 | 17.8 | 18 | 18.7 | 18.8 | 18.8 |
| Beamwidth, Horizontal, degrees | 63 | 61 | 67 | 65 | 61 | 58 | 61 |
| Beamwidth, Vertical, degrees | 14.6 | 12.3 | 5.7 | 5.5 | 5.1 | 4.4 | 4.2 |
| Beam Tilt, degrees | 2–14 | 2–14 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 20 | 19 | 20 | 19 | 21 | 20 | 20 |
| Front-to-Back Ratio at 180°, dB | 29 | 33 | 36 | 39 | 39 | 35 | 37 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -153 | | | | | |
| PIM, 3rd Order, 2 x 40 W, dBc | | | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 250 | 250 | 200 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 617–698 | 698–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2500 | 2500–2690 |
|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 14 | 14.3 | 17.4 | 17.7 | 18.1 | 18.4 | 18.3 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.7 | ±0.4 | ±0.5 | ±0.7 | ±0.5 | ±0.4 |
| Gain by Beam Tilt, average, dBi | 2° 14.1 8° 14.1 14° 13.9 | 2° 14.5 8° 14.5 14° 14.2 | 2° 17.3 6° 17.5 12° 17.4 | 2° 17.6 6° 17.8 12° 17.8 | 2° 17.9 6° 18.4 12° 18.3 | 2° 18.3 6° 18.7 12° 18.3 | 2° 18.2 6° 18.6 12° 18.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±4.3 | ±6 | ±2.9 | ±3.9 | ±5.8 | ±7.9 | ±7.1 |
| Beamwidth, Vertical Tolerance, degrees | ±1.1 | ±1.5 | ±0.2 | ±0.3 | ±0.4 | ±0.3 | ±0.2 |

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|--|----|----|----|----|----|----|----|
| USLS, beampeak to 20° above beampeak, dB | 20 | 18 | 15 | 17 | 18 | 16 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 22 | 29 | 32 | 29 | 28 | 29 |
| CPR at Boresight, dB | 16 | 16 | 21 | 25 | 20 | 17 | 21 |
| CPR at Sector, dB | 8 | 8 | 6 | 6 | 6 | 6 | 7 |

Mechanical Specifications

| | |
|---|---|
| Mechanical Tilt Range | 0°–15° |
| Wind Loading @ Velocity, frontal | 765.0 N @ 150 km/h (172.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 251.0 N @ 150 km/h (56.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,032.0 N @ 100 mph (232.0 lbf @ 100 mph) |
| Wind Loading @ Velocity, rear | 788.0 N @ 150 km/h (177.1 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

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|-----------------------|----------------------|
| Width, packed | 752 mm 29.606 in |
| Depth, packed | 387 mm 15.236 in |
| Length, packed | 1982 mm 78.032 in |
| Weight, gross | 62.5 kg 137.789 lb |

Regulatory Compliance/Certifications

| 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-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. |
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* Footnotes

| | |
|-------------------------|---|
| Performance Note | Severe environmental conditions may degrade optimum performance |
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