

FFV4-65B-R3-HG



12-Port antenna, 4 x 617-894 MHz, 8 x 1695-2690 MHz, 65° HPBW, 3 x RET

- Antenna design optimized to offer high gain performances
- Broadband performance 617-894 MHz and 1695-2690 MHz

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 | 0 |
| RF Connector Quantity, mid band | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 12 |

Remote Electrical Tilt (RET) Information

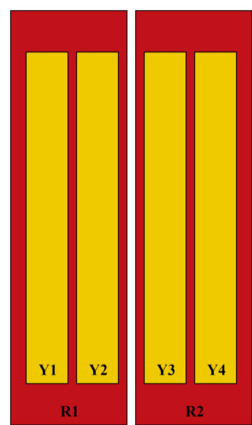
| | |
|--|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | Low band (1) Mid band (2) |
| Power Consumption, active state, maximum | 10 W |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

FFV4-65B-R3-HG

Dimensions

| | |
|--------------------------|----------------------|
| Width | 640 mm 25.197 in |
| Depth | 235 mm 9.252 in |
| Length | 1828 mm 71.969 in |
| Net Weight, antenna only | 48.5 kg 106.924 lb |

Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------------|----------|------------------|
| R1 | 617-894 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxR1 |
| R2 | 617-894 | 3 - 4 | | | |
| Y1 | 1695-2690 | 5 - 6 | 2 | AISG1 | CPxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7 - 8 | | | |
| Y3 | 1695-2690 | 9 - 10 | 3 | AISG1 | CPxxxxxxxxxxxxY3 |
| Y4 | 1695-2690 | 11 - 12 | | | |

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

Port Configuration



FFV4-65B-R3-HG

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

| | R1,R2 | R1,R2 | R1,R2 | Y1,Y2,Y3,Y4 | Y1,Y2,Y3,Y4 | Y1,Y2,Y3,Y4 | Y1,Y2,Y3,Y4 | Y1,Y2,Y3,Y4 |
|--|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| Frequency Band, MHz | 617–698 | 698–806 | 806–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2500 | 2500–2690 |
| RF Port | 1-4 | 1-4 | 1-4 | 5-12 | 5-12 | 5-12 | 5-12 | 5-12 |
| Gain, dBi | 14.5 | 14.8 | 15.7 | 18.2 | 18.5 | 18.8 | 19.2 | 19.7 |
| Beamwidth, Horizontal, degrees | 68 | 64 | 58 | 62 | 62 | 63 | 55 | 51 |
| Beamwidth, Vertical, degrees | 12.9 | 11.7 | 10.5 | 5 | 4.8 | 4.5 | 4 | 3.7 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–9 | 2–9 | 2–9 | 2–9 | 2–9 |
| USLS (First Lobe), dB | 16 | 17 | 15 | 15 | 16 | 18 | 17 | 17 |
| Front-to-Back Ratio at 180°, dB | 30 | 33 | 33 | 32 | 32 | 32 | 31 | 31 |
| CPR at Boresight, dB | 17 | 17 | 16 | 20 | 25 | 21 | 22 | 19 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 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 |
| 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 | 250 | 250 | 250 | 200 | 200 | 200 | 200 | 200 |

Mechanical Specifications

| | |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 715.0 N @ 150 km/h (160.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 206.0 N @ 150 km/h (46.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 911.0 N @ 150 km/h (204.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 446.0 N @ 150 km/h (100.3 lbf @ 150 km/h) |
| Wind Speed, maximum | 241.4 km/h (150 mph) |

Packaging and Weights

FFV4-65B-R3-HG

| | |
|----------------|----------------------|
| Width, packed | 752 mm 29.606 in |
| Depth, packed | 387 mm 15.236 in |
| Length, packed | 1982 mm 78.032 in |
| Weight, gross | 64.2 kg 141.537 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

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

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