

VV-65A-R1



4-port sector antenna, 4x 1695–2690 MHz, 65° HPBW, 1x RET#The two high band arrays utilize a common tilt.

- The RET interface comprises one pair of AISG input/output ports
- Meets -153dBc 3rd order PIM, using 2x40W carriers

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 | PVC, UV resistant |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high 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 | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 10 W |
| Protocol | 3GPP/AISG 2.0 |

Dimensions

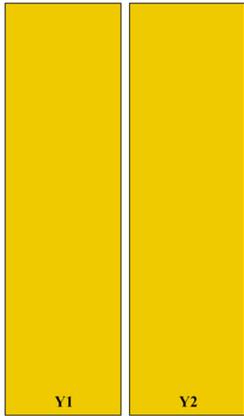
| | |
|--------------|--------------------|
| Width | 307 mm 12.087 in |
| Depth | 118 mm 4.646 in |

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Length 1390 mm | 54.724 in

Net Weight, antenna only 10.8 kg | 23.81 lb

Array Layout



| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------|------------|----------|-----------------------|
| Y1 | 1695-2690 | 1 - 2 | 65° | 1 | AISG1 | CPxxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 3 - 4 | 65° | | | |

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz

Polarization ±45°

Total Input Power, maximum 400 W @ 50 °C

Electrical Specifications

Y1,Y2

Y1,Y2

Y1,Y2

Y1,Y2

Y1,Y2

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| Frequency Band, MHz | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2500 | 2490–2690 |
|--|-----------|-----------|-----------|-----------|-----------|
| RF Port | 1,2,3,4 | 1,2,3,4 | 1,2,3,4 | 1,2,3,4 | 1,2,3,4 |
| Gain, dBi | 17.5 | 17.7 | 18.2 | 18.5 | 18.6 |
| Beamwidth, Horizontal, degrees | 66 | 65 | 66 | 63 | 62 |
| Beamwidth, Vertical, degrees | 6.9 | 6.5 | 6.1 | 5.4 | 5.2 |
| Beam Tilt, degrees | 0–12 | 0–12 | 0–12 | 0–12 | 0–12 |
| USLS (First Lobe), dB | 17 | 18 | 18 | 21 | 21 |
| Front-to-Back Ratio at 180°, dB | 30 | 31 | 32 | 29 | 30 |
| Isolation, Cross Polarization, dB | 30 | 30 | 30 | 30 | 30 |
| Isolation, Inter-band, dB | 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 |
| PIM, 3rd Order, 2 x 40 W, dBc | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 300 | 250 |

Mechanical Specifications

| | |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 494.0 N @ 150 km/h (111.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 102.0 N @ 150 km/h (22.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 598.0 N @ 150 km/h (134.4 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|---------------------|
| Width, packed | 404 mm 15.906 in |
| Depth, packed | 278 mm 10.945 in |
| Length, packed | 1527 mm 60.118 in |
| Weight, gross | 19 kg 41.888 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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |

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UK-ROHS

Compliant



Included Products

- 600899A-2 – 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

Performance Note Severe environmental conditions may degrade optimum performance