VV-65A-R1B



4-port sector antenna, 4x 1695–2690 MHz, 65° HPBW, 1x RET and 1x SBT, the two highband arrays utilize a common tilt.

• The RET interface comprises one pair of AISG input/output ports

General Specifications

Antenna Type Sector

Band Single band

Color Light Gray (RAL 7035)

Grounding TypeRF connector body grounded to reflector and mounting bracket

 Performance Note
 Outdoor usage

 Radome Material
 PVC, UV resistant

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 4

RF Connector Quantity, total

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 Bias Tee Port 1

Internal RET High band (1)

Power Consumption, idle state, maximum 1 W

Power Consumption, normal conditions, maximum 10 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

 Width
 305 mm | 12.008 in

 Depth
 118 mm | 4.646 in

 Length
 1390 mm | 54.724 in

 Net Weight, without mounting kit
 11.2 kg | 24.692 lb

COMMSCOPE®

VV-65A-R1B

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz

Polarization ±45°

Total Input Power, maximum 450 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	1695-1990	1920-2200	2300-2500	2490-2690
Gain, dBi	17.7	18.2	18.5	18.6
Beamwidth, Horizontal, degrees	66	66	63	62
Beamwidth, Vertical, degrees	6.7	6.1	5.4	5.2
Beam Tilt, degrees	0-12	0-12	0-12	0-12
USLS (First Lobe), dB	17	19	22	22
Front-to-Back Ratio at 180°, dB	31	32	29	31
Isolation, Cross Polarization, dB	30	30	30	30
Isolation, Inter-band, dB	28	28	28	28
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	1695-1990	1920-2200	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	17.4	17.9	18.3	18.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.4	±0.5
Gain by Beam Tilt, average, dBi	0° 17.3 6° 17.5 12° 17.3	0° 17.9 6° 18.0 12° 17.7	0° 18.0 6° 18.4 12° 18.1	0° 18.3 6° 18.4 12° 17.7
Beamwidth, Horizontal Tolerance, degrees	±2.6	±1.9	±2.1	±2.8
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.5	±0.2	±0.3
USLS, beampeak to 20° above beampeak, dB	17	17	19	17
Front-to-Back Total Power at 180° ± 30°, dB	26	27	26	26
CPR at Boresight, dB	17	19	21	20

Page 2 of 3



VV-65A-R1B

CPR at Sector, dB 15 14 8 9

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
 413 mm | 16.26 in

 Depth, packed
 249 mm | 9.803 in

 Length, packed
 1525 mm | 60.039 in

 Weight, gross
 19.5 kg | 42.99 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

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 NoteSevere environmental conditions may degrade optimum performance

