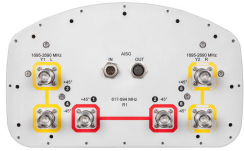


FVV-65B-R3

6-port sector antenna, 2x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET, 600 MHz-Ready Antenna Technology



General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.26 m ² 2.799 ft ²
Effective Projective Area (EPA), lateral	0.22 m ² 2.368 ft ²
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	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information, General

RET Hardware	CommRET v1
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Dimensions

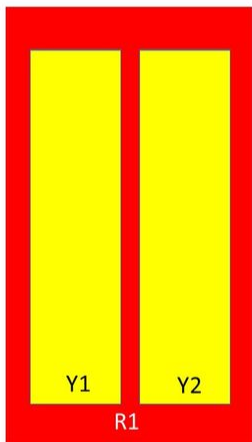
Width	300 mm 11.811 in
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FVV-65B-R3

Length 1828 mm | 71.969 in

Depth 181 mm | 7.126 in

Array Layout



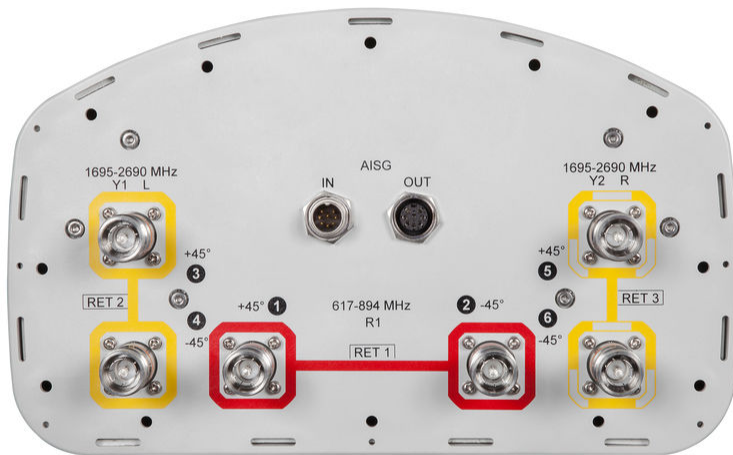
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY2

Left Right
Bottom

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

Port Configuration

FVV-65B-R3



Electrical Specifications

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

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Input Voltage	10–30 Vdc
Internal RET	High band (2) Low band (1)

FVV-65B-R3

Electrical Specifications

Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain, dBi	14.3	14.7	17.5	18.1	18.4	18.7	18.7
Beamwidth, Horizontal, degrees	71	70	66	64	64	63	60
Beamwidth, Vertical, degrees	14.5	12.2	5.6	5.3	5	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	19	20	19	21	21
Front-to-Back Ratio at 180°, dB	25	29	37	35	31	28	32
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	-150	-150	-150	-150	-150	-150
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	17.6	18.1	18.4	18.4
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.7	±0.5	±0.5	±0.4	±0.4
Gain by Beam Tilt, average, dBi	2° 14.1 8° 14.1 14° 13.9	2° 14.4 8° 14.4 14° 14.0	2° 16.9 7° 17.1 12° 16.9	2° 17.4 7° 17.7 12° 17.7	2° 17.8 7° 18.1 12° 18.1	2° 18.2 7° 18.5 12° 18.1	2° 18.2 7° 18.6 12° 18.2
Beamwidth, Horizontal Tolerance, degrees	±2	±3.3	±3.5	±2.7	±2.9	±6.7	±7.5
Beamwidth, Vertical Tolerance, degrees	±1.3	±1.5	±0.4	±0.2	±0.3	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB		17	15	17	17	17	13
Front-to-Back Total Power at 180° ± 30°, dB	20	22	24	26	26	24	27
CPR at Boresight, dB	16	15	17	18	19	18	16
CPR at Sector, dB	9	9	8	9	6	4	3

Mechanical Specifications

Wind Loading at Velocity, frontal

278.0 N @ 150 km/h | 63.6 lbf @ 150 km/h

FVV-65B-R3

Wind Loading at Velocity, lateral	230.0 N @ 150 km/h 51.7 lbf @ 150 km/h
Wind Loading at Velocity, maximum	120.7 lbf @ 150 km/h 537.0 N @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	391 mm 15.394 in
Depth, packed	296 mm 11.654 in
Length, packed	1938 mm 76.299 in
Net Weight, without mounting kit	19.9 kg 43.872 lb
Weight, gross	32.2 kg 70.989 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



Included Products

BSAMNT-3 — 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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance