

# FFVV-65B-R2-V3



8-port sector antenna, 4x 617-894 and 4x 1695-2690 MHz, 65° HPBW, 2x RET

- Antenna includes 2xSingle Column X-Pol Arrays for 617-894MHz and 2xSingle Column X-Pol Arrays for 1695-2690MHz

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

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

## Dimensions

<b>Width</b>	498 mm   19.606 in
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<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, antenna only</b>	32 kg   70.548 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	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			

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

## Port Configuration



## Electrical Specifications

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

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## Electrical Specifications

	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
<b>Frequency Band, MHz</b>	<b>617–728</b>	<b>758–894</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
<b>Gain, dBi</b>	14.1	14.7	17.8	18.1	18.2	18.8	18.8
<b>Beamwidth, Horizontal, degrees</b>	64	65	70	71	68	52	43
<b>Beamwidth, Vertical, degrees</b>	14.3	12.6	5.6	5.3	5	4.5	4.2
<b>Beam Tilt, degrees</b>	2–14	2–14	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	18	17	17	17	21	21
<b>Front-to-Back Ratio at 180°, dB</b>	28	28	33	38	37	33	30
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200	200	200	200

## Electrical Specifications, BASTA

	617–728	758–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
<b>Frequency Band, MHz</b>	<b>617–728</b>	<b>758–894</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.5	14.3	17.4	17.8	17.9	18.3	18.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.6	±0.6	±0.4	±0.4	±0.6	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7	±5	±4	±3	±5	±15	±7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.8	±0.3	±0.2	±0.4	±0.2	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>		18	16	16	16	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	21	27	30	30	29	27
<b>CPR at Boresight, dB</b>	17	17	19	21	18	16	20
<b>CPR at Sector, dB</b>	9	7	9	8	8	2	0

## Mechanical Specifications

**Effective Projective Area (EPA), frontal** 0.58 m<sup>2</sup> | 6.243 ft<sup>2</sup>

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<b>Effective Projective Area (EPA), lateral</b>	0.18 m <sup>2</sup>   1.938 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	622.0 N @ 150 km/h (139.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	188.0 N @ 150 km/h (42.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	746.0 N @ 150 km/h (167.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	428.0 N @ 150 km/h (96.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2015 mm   79.331 in
<b>Weight, gross</b>	45.6 kg   100.531 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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-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