

# FFVV-65C-R2-HG



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

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

## 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)

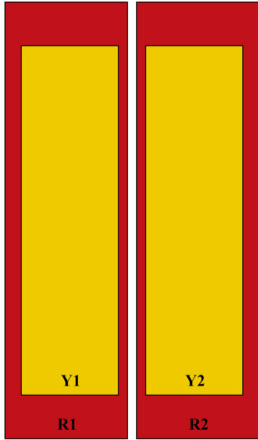
## Dimensions

<b>Width</b>	640 mm   25.197 in
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**Depth** 235 mm | 9.252 in  
**Length** 2438 mm | 95.984 in

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	617-894	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	617-894	3 - 4			
Y1	1695-2690	5 - 6	2	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			

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

## Port Configuration



## Electrical Specifications

**Impedance** 50 ohm  
**Operating Frequency Band** 1695 – 2690 MHz | 617 – 894 MHz

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<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>
<b>Frequency Band, MHz</b>	<b>617-698</b>	<b>698-894</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>	1-4	1-4	5-8	5-8	5-8	5-8	5-8
<b>Gain, dBi</b>	16.2	17	19.9	20.1	20.3	20.2	20.7
<b>Beamwidth, Horizontal, degrees</b>	68	62	65	59	61	67	57
<b>Beamwidth, Vertical, degrees</b>	10.2	8.6	4.2	4.1	3.9	3.4	3.2
<b>Beam Tilt, degrees</b>	2-12	2-12	2-9	2-9	2-9	2-9	2-9
<b>USLS (First Lobe), dB</b>	15	16	17	16	17	17	19
<b>Front-to-Back Ratio at 180°, dB</b>	30	33	37	38	36	35	34
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	23	30	31	29	27	26
<b>CPR at Boresight, dB</b>	16	16	25	23	19	21	27
<b>CPR at Sector, dB</b>	8	8	4	4	5	7	7
<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

	<b>617-698</b>	<b>698-894</b>	<b>1695-1880</b>	<b>1850-1990</b>	<b>1920-2200</b>	<b>2300-2500</b>	<b>2500-2690</b>
<b>Frequency Band, MHz</b>	<b>617-698</b>	<b>698-894</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>	15.7	16.3	19	19.6	19.7	19.3	19.8
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.6	±0.7	±0.3	±0.5	±0.6	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6	±4	±5	±4	±9	±9	±10
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±1	±0.2	±0.2	±0.3	±0.3	±0.2
<b>USLS, beampeak to 20° above</b>	15	15	12	14	15	13	11

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beampeak, dB

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	987.0 N @ 150 km/h (221.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	291.0 N @ 150 km/h (65.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,257.0 N @ 150 km/h (282.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	616.0 N @ 150 km/h (138.5 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	744 mm   29.291 in
<b>Depth, packed</b>	384 mm   15.118 in
<b>Length, packed</b>	2590 mm   101.969 in
<b>Weight, gross</b>	80.7 kg   177.913 lb
<b>Weight, net</b>	59.5 kg   131.175 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## Included Products

BSAMNT-3F	-	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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