

# FFV4-65B-R6-V3



12-port sector antenna, 4x 617-894 and 8x 1695-2690 MHz, 65° HPBW, 6x RET

- Similar to FFV4-65B-R6-V2, except 0-10 tilt for mid band arrays

## 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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## 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 (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

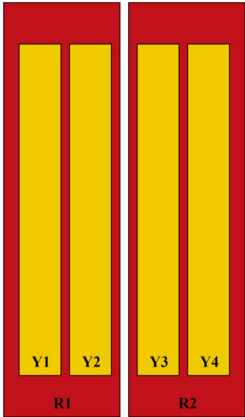
## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in

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**Length** 2000 mm | 78.74 in  
**Net Weight, antenna only** 38.6 kg | 85.098 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	617-894	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
R2	617-894	3 - 4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	6	CPxxxxxxxxxxxxxxxxY4

(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  
**Polarization** ±45°

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Total Input Power, maximum

1,400 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4
<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>	1,2,3,4	1,2,3,4	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12	5,6,7,8,9,10,11,12
<b>Gain, dBi</b>	14.7	15.3	16.3	17	17.2	17.5	17.9
<b>Beamwidth, Horizontal, degrees</b>	64	57	65	63	60	58	56
<b>Beamwidth, Vertical, degrees</b>	12.1	10.5	6.5	6.2	5.8	5.3	5
<b>Beam Tilt, degrees</b>	2–14	2–14	0–10	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	15	17	15	16	17	19	18
<b>Front-to-Back Ratio at 180°, dB</b>	29	31	33	34	33	31	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

	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
<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>	14.4	14.9	15.8	16.6	16.9	17.1	17.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.5	±0.8	±0.5	±0.5	±0.6	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5	±5	±7	±6	±7	±5	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±1	±0.5	±0.3	±0.4	±0.3	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	16	14	15	15	15	14
<b>Front-to-Back Total</b>	22	22	25	28	27	26	23

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## Power at 180° ± 30°, dB

<b>CPR at Boresight, dB</b>	17	16	17	19	19	20	22
<b>CPR at Sector, dB</b>	10	7	8	8	8	5	4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	210.0 N @ 150 km/h (47.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	826.0 N @ 150 km/h (185.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	474.0 N @ 150 km/h (106.6 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>	2187 mm   86.102 in
<b>Weight, gross</b>	53 kg   116.845 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-4 – 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