

# FFV4-65C-R6-V2



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

- Antenna includes 2x Single Column X-Pol Arrays for 617-894MHz and 4x Single Column X-Pol Arrays for 1695-2690MHz, suitable for 4x MIMO applications

## 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>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, mid band</b>	0
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

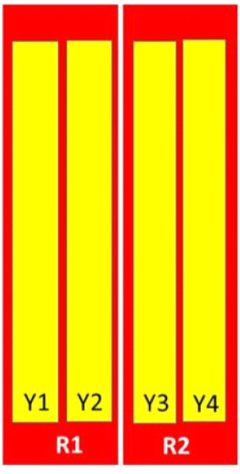
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10-30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

# FFV4-65C-R6-V2

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, antenna only</b>	40.5 kg   89.287 lb

## Array Layout



Array	Freq (MHz)	Conns	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

# FFV4-65C-R6-V2



## 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>	1,400 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
<b>RF Port</b>	1-4	1-4	5-12	5-12	5-12	5-12	5-12
<b>Gain, dBi</b>	14.8	15.5	16.6	17	17.3	17.6	18
<b>Beamwidth, Horizontal, degrees</b>	65	57	64	65	63	58	57
<b>Beamwidth, Vertical, degrees</b>	10.2	8.7	6.6	6.3	6	5.3	5.1
<b>Beam Tilt, degrees</b>	2–13	2–13	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	19	18	18	18	19	20	19
<b>Front-to-Back Ratio at 180°, dB</b>	30	31	35	35	33	31	28
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25

# FFV4-65C-R6-V2

<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

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	829.0 N @ 150 km/h (186.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	217.0 N @ 150 km/h (48.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,102.0 N @ 150 km/h (247.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	570.0 N @ 150 km/h (128.1 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>	2685 mm   105.709 in
<b>Weight, gross</b>	61.4 kg   135.364 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## 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.
BSAMNT-M	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

## \* Footnotes

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**Performance Note** Severe environmental conditions may degrade optimum performance