

# FFV4-65B-R3-HG



12-Port antenna, 4 x 617-894 MHz, 8 x 1695-2690 MHz, 65° HPBW, 3 x 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>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, mid band</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

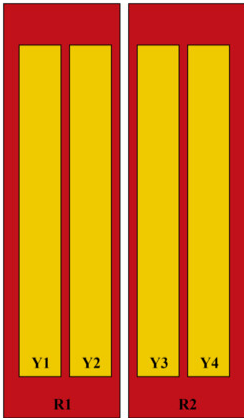
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (1)   Mid band (2)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state,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

## Dimensions

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<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, antenna only</b>	48.5 kg   106.924 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	617-894	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	617-894	3 - 4			
Y1	1695-2690	5 - 6	2	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			
Y3	1695-2690	9 - 10	3	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12			

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

## Port Configuration



## Electrical Specifications

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<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

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>Y1,Y2,Y3,Y4</b>	<b>Y1,Y2,Y3,Y4</b>	<b>Y1,Y2,Y3,Y4</b>	<b>Y1,Y2,Y3,Y4</b>	<b>Y1,Y2,Y3,Y4</b>
	<b>617-698</b>	<b>698-806</b>	<b>806-894</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>698-806</b>	<b>806-894</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	1-4	5-12	5-12	5-12	5-12	5-12
<b>Gain, dBi</b>	14.5	14.8	15.7	18.2	18.5	18.8	19.2	19.7
<b>Beamwidth, Horizontal, degrees</b>	68	64	58	62	62	63	55	51
<b>Beamwidth, Vertical, degrees</b>	12.9	11.7	10.5	5	4.8	4.5	4	3.7
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-9	2-9	2-9	2-9	2-9
<b>USLS (First Lobe), dB</b>	16	17	15	15	16	18	17	17
<b>Front-to-Back Ratio at 180°, dB</b>	30	33	33	32	32	32	31	31
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	200	200	200

## Electrical Specifications, BASTA

	<b>617-698</b>	<b>698-806</b>	<b>806-894</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>698-806</b>	<b>806-894</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>	14.1	14.5	15.1	17.7	18.2	18.4	18.8	19.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.5	±0.6	±0.6	±0.5	±0.6	±0.5	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5	±4	±4	±4	±6	±6	±7	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.8	±0.7	±0.3	±0.2	±0.3	±0.3	±0.2
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	24	23	26	26	25	25	24
<b>CPR at Boresight, dB</b>	17	17	16	20	25	21	22	19

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CPR at Sector, dB                      10                      8                      8                      9                      9                      6                      6                      6

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	715.0 N @ 150 km/h (160.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	911.0 N @ 150 km/h (204.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	446.0 N @ 150 km/h (100.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241.4 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	387 mm   15.236 in
<b>Length, packed</b>	1982 mm   78.032 in
<b>Weight, gross</b>	64.2 kg   141.537 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-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

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
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

