

# FF2HH-6533A-R5



12-Port Sector/multibeam antenna, 4x 617–894 MHz 65° HPBW and 8x 1695–2360 MHz 4x 33° HPBW, 5x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Each High Band antenna down tilt can be independently adjusted for greater flexibility in network optimization

## General Specifications

<b>Antenna Type</b>	Multibeam
<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, 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 (1)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W


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**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 640 mm | 25.197 in  
**Depth** 235 mm | 9.252 in  
**Length** 1224 mm | 48.189 in  
**Net Weight, without mounting kit** 40.1 kg | 88.405 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	617-894	3-4		
Y1	1695-2360	5-6	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7-8	3	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2360	9-10	4	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2360	11-12	5	CPxxxxxxxxxxxxxxxxY4

(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 – 2360 MHz   617 – 894 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	617–698	698–806	806–894	1695–1880	1850–1990	1920–2180	2300–2360
<b>Gain, dBi</b>	12.6	13.2	13.1	18.1	19	19.4	18.7
<b>Beam Centers, Horizontal, degrees</b>				±27	±27	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	72	63	64	36	35	32	29
<b>Beamwidth, Vertical, degrees</b>	21.3	18.8	16.4	7.4	6.9	6.5	5.8
<b>Beam Tilt, degrees</b>	5–22	5–22	5–18	2–10	2–10	2–10	2–10
<b>USLS (First Lobe), dB</b>	16	18	20	16	16	18	19
<b>Front-to-Back Ratio at 180°, dB</b>	29	33	27	35	36	36	31
<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	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	617–698	698–806	806–894	1695–1880	1850–1990	1920–2180	2300–2360
<b>Gain by all Beam Tilts, average, dBi</b>	12.3	12.8	12.7	17.4	18.6	19	18
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.6	±0.8	±0.8	±0.5	±0.4	±1.5
<b>Gain by Beam Tilt, average, dBi</b>	5° 12.4 13° 12.3 22° 12.0	5° 13.0 13° 12.8 22° 12.3	5° 12.9 11° 12.8 18° 12.1	2° 17.3 6° 17.5 10° 17.5	2° 18.5 6° 18.7 10° 18.7	2° 18.9 6° 19.1 10° 18.9	2° 17.7 6° 18.1 10° 18.0
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6.6	±7.9	±10.7	±2	±1.8	±2.6	±3.4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±2.1	±1.8	±1.2	±0.3	±0.2	±0.4	±0.2
<b>USLS, beampeak to 20° above</b>	15	15	16	15	16	17	17

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## beampeak, dB

<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	22	21	26	29	29	25
<b>CPR at Boresight, dB</b>	18	19	18	18	20	19	12
<b>CPR at Sector, dB</b>	10	9	11				
<b>CPR at 10 dB Horizontal Beamwidth, dB</b>				12	12	13	4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	505.0 N @ 150 km/h (113.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	156.0 N @ 150 km/h (35.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	520.0 N @ 150 km/h (116.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 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>	1379 mm   54.291 in
<b>Weight, gross</b>	52.5 kg   115.743 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-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.
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## \* Footnotes

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

## 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** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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

# BSAMNT-3

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