

# FHH-65C-R3



6-port sector antenna, 2x 617-806 and 4x 1695–2360 MHz, 65° HPBW, 3x RET, 600 MHz-Ready Antenna Technology

## Electrical Specifications

Frequency Band, MHz	617–698	698–806	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	15.8	16.3	18.1	18.6	18.7	19.2
Beamwidth, Horizontal, degrees	66	61	58	61	64	62
Beamwidth, Vertical, degrees	10.4	9.3	5.6	5.2	4.9	4.4
Beam Tilt, degrees	2–13	2–13	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	17	20	18	19	21
Front-to-Back Ratio at 180°, dB	31	29	35	35	35	35
Isolation, Cross Polarization, dB	28	28	28	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc		-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	250	250	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

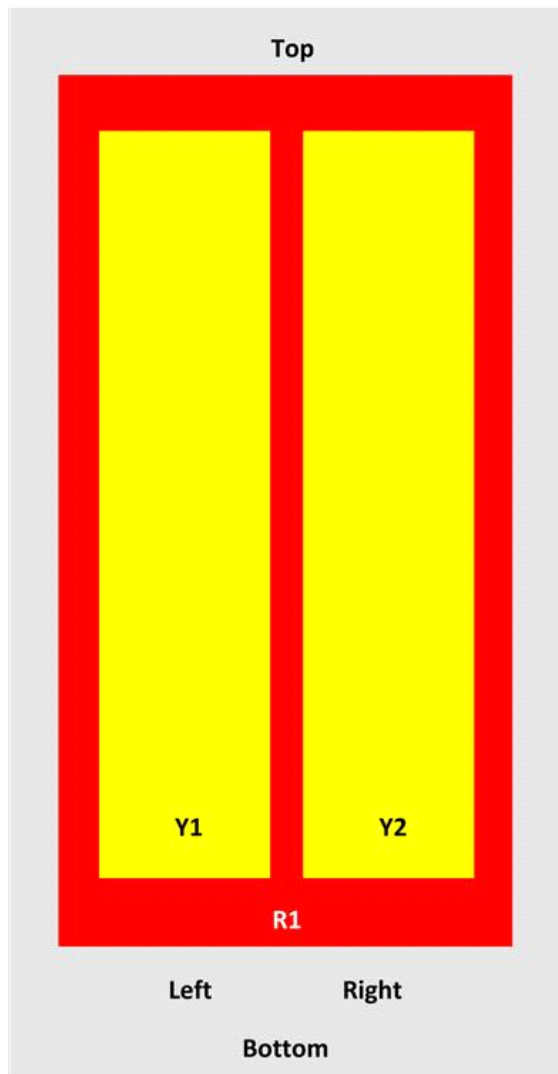
## Electrical Specifications, BASTA\*

Frequency Band, MHz	617–698	698–806	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	15.6	16.1	17.8	18.2	18.4	18.9
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.5	±0.5	±0.4	±0.4
Gain by Beam Tilt, average, dBi	2 °   15.5 7 °   15.8 13 °   15.6	2 °   15.9 7 °   16.2 13 °   15.9	2 °   17.7 7 °   17.9 12 °   17.7	2 °   17.9 7 °   18.3 12 °   18.2	2 °   18.1 7 °   18.6 12 °   18.4	2 °   18.4 7 °   19.0 12 °   18.8
Beamwidth, Horizontal Tolerance, degrees	±1.8	±4.2	±4.6	±6.2	±6	±5.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.7	±0.3	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	18	14	15	15	16	17
Front-to-Back Total Power at 180° ± 30°, dB	25	23	27	28	28	28
CPR at Boresight, dB	23	25	17	20	19	23
CPR at Sector, dB	11	9	8	10	6	9

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs](#).

## Array Layout

## FHH-65C-R3



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-806	1-2	1	ANXXXXXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXXXXXX2
Y2	1695-2360	5-6	3	ANXXXXXXXXXXXXXXXXX3

View from the front of the antenna

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

## General Specifications

Operating Frequency Band

1695 – 2360 MHz | 617 – 806 MHz

Antenna Type

Sector

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<b>Band</b>	Multiband
<b>Performance Note</b>	Outdoor usage
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	6
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Interface</b>	4.3-10 Female
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>Wind Loading, frontal</b>	115.1 lbf @ 150 km/h   510.0 N @ 150 km/h
<b>Wind Loading, lateral</b>	374.0 N @ 150 km/h   84.1 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	196.0 lbf @ 150 km/h   872.0 N @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	2438.0 mm   96.0 in
<b>Width</b>	395.0 mm   15.6 in
<b>Depth</b>	228.0 mm   9.0 in
<b>Net Weight, without mounting kit</b>	31.5 kg   69.4 lb

## Remote Electrical Tilt (RET) Information

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

## Packed Dimensions

<b>Length</b>	2645.0 mm   104.1 in
<b>Width</b>	514.0 mm   20.2 in

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**Depth** 372.0 mm | 14.6 in  
**Shipping Weight** 48.1 kg | 106.0 lb

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU  
ISO 9001:2015  
China RoHS SJ/T 11364-2014

### Classification

Compliant by Exemption  
Designed, manufactured and/or distributed under this quality management system  
Above Maximum Concentration Value (MCV)



## 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.

## \* Footnotes

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