

# FFHH-65B-R3

8-port sector antenna, 4x 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	14.1	14.3	17.6	18.4	19.0	19.7
Beamwidth, Horizontal, degrees	65	60	66	60	60	54
Beamwidth, Vertical, degrees	14.9	13.3	5.7	5.3	4.9	4.4
Beam Tilt, degrees	2-14	2-14	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	17	20	19	19	20
Front-to-Back Ratio at 180°, dB	33	29	36	40	40	42
Isolation, Cross Polarization, dB	28	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28
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	200	200	200	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	13.6	13.9	17.2	18.1	18.5	19.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.6	±0.6	±0.5	±0.5	±0.5
Gain by Beam Tilt, average, dBi	2 °   13.4 8 °   13.7 14 °   13.5	2 °   13.8 8 °   13.9 14 °   13.8	2 °   17.1 7 °   17.3 12 °   17.1	2 °   18.0 7 °   18.2 12 °   17.9	2 °   18.3 7 °   18.6 12 °   18.4	2 °   19.0 7 °   19.4 12 °   19.2
Beamwidth, Horizontal Tolerance, degrees	±3	±4	±4.5	±5.6	±6.5	±7.9
Beamwidth, Vertical Tolerance, degrees	±1.1	±1.1	±0.3	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	19	17	15	15	16	17
Front-to-Back Total Power at 180° ± 30°, dB	24	21	29	32	32	32
CPR at Boresight, dB	22	24	18	16	18	22
CPR at Sector, dB	8	9	7	7	9	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



Left Bottom Right

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-806	1-2	1	ANxxxxxxxxxxxxxxxxx1
R2	617-806	3-4		
Y1	1695-2360	5-6	2	ANxxxxxxxxxxxxxxxxx2
Y2	1695-2360	7-8	3	ANxxxxxxxxxxxxxxxxx3

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

## Port Configuration



## General Specifications

**Operating Frequency Band**

1695 – 2360 MHz | 617 – 806 MHz

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<b>Antenna Type</b>	Sector
<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>	8
<b>RF Connector Quantity, low band</b>	4
<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, maximum</b>	1041.0 N @ 150 km/h 234.0 lbf @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	1830.0 mm   72.0 in
<b>Width</b>	640.0 mm   25.2 in
<b>Depth</b>	235.0 mm   9.3 in
<b>Net Weight, without mounting kit</b>	46.0 kg   101.4 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>	10 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>	1982.0 mm   78.0 in
<b>Width</b>	752.0 mm   29.6 in
<b>Depth</b>	387.0 mm   15.2 in

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## Shipping Weight

57.0 kg | 125.7 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-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