FFHH-65C-R3

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

Electrical Specifications

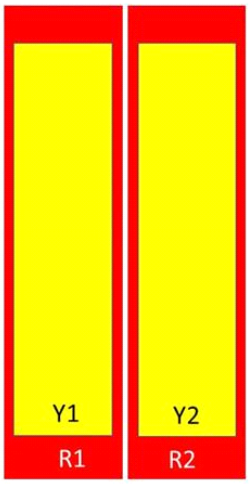
Frequency Band, MHz	617–698	698–806	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	15.4	15.8	17.9	18.4	18.8	19.6
Beamwidth, Horizontal, degrees	66	61	64	65	64	56
Beamwidth, Vertical, degrees	10.2	9.2	5.7	5.3	4.9	4.4
Beam Tilt, degrees	2–13	2–13	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	17	19	19	19	22
Front-to-Back Ratio at 180°, dB	33	31	38	41	40	38
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	-150	-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	15.2	15.5	17.5	18.0	18.4	19.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±0.5	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 ° | 15.0 8 ° | 15.3 13 ° | 15.1	2 ° | 15.3 8 ° | 15.6 13 ° | 15.3	2 ° | 17.3 7 ° | 17.6 12 ° | 17.5	2 ° | 17.8 7 ° | 18.1 12 ° | 17.9	2 ° | 18.1 7 ° | 18.5 12 ° | 18.4	2 ° | 18.7 7 ° | 19.3 12 ° | 19.2
Beamwidth, Horizontal Tolerance, degrees	±3	±5.1	±5.9	±5.6	±5.9	±7.2
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.6	±0.4	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	17	14	15	15	16	17
Front-to-Back Total Power at 180° ± 30°, dB	23	21	30	31	31	30
CPR at Boresight, dB	21	20	18	18	19	19
CPR at Sector, dB	7	10	8	7	8	7

* 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



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

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-806	1-2	1	ANxxxxxxxxxxxxxxxx1
R2	617-806	3-4		
Y1	1695-2360	5-6	2	ANxxxxxxxxxxxxxxxx2
Y2	1695-2360	7-8	3	ANxxxxxxxxxxxxxxxx3

Port Configuration

General Specifications

Operating Frequency Band 1695 – 2360 MHz | 617 – 806 MHz

FFHH-65C-R3

Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	8
RF Connector Quantity, low band	4
RF Connector Quantity, high band	4
RF Connector Interface	4.3-10 Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum | Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	1,055.0 N @ 150 km/h | 237.2 lbf @ 150 km/h
Wind Loading, lateral	355.0 N @ 150 km/h | 79.8 lbf @ 150 km/h
Wind Loading, maximum	1,433.0 N @ 150 km/h | 322.2 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	2437.0 mm | 95.9 in
Width	640.0 mm | 25.2 in
Depth	235.0 mm | 9.3 in
Net Weight, without mounting kit	57.9 kg | 127.6 lb

Remote Electrical Tilt (RET) Information

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

Packed Dimensions

Length	2590.0 mm | 102.0 in
Width	752.0 mm | 29.6 in

Depth	380.0 mm | 15.0 in
Shipping Weight	84.4 kg | 186.1 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	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.

BSAMNT-M4 — 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

Performance Note	Severe environmental conditions may degrade optimum performance