

FHH-65C-R3



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

OBSOLETE

This product was discontinued on: **March 31, 2023**

Replaced By:

FVV-65C-R3

6-port sector antenna, 2x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET, 600 MHz-Ready Antenna Technology

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
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RET Interface, quantity	1 female 1 male
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	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

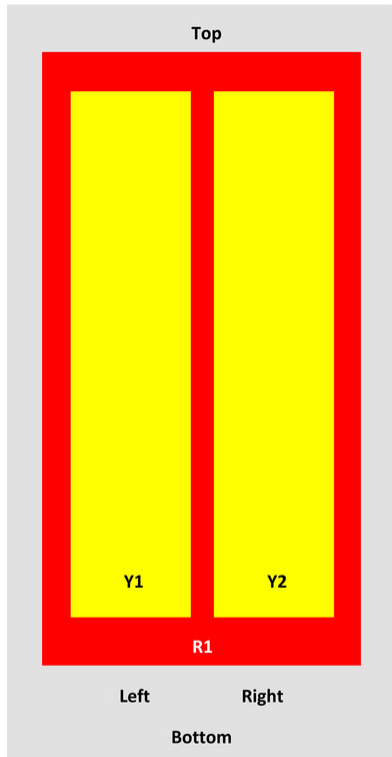
Dimensions

Width	395 mm 15.551 in
Depth	228 mm 8.976 in
Length	2438 mm 95.984 in
Net Weight, without mounting kit	31.5 kg 69.446 lb

Array Layout

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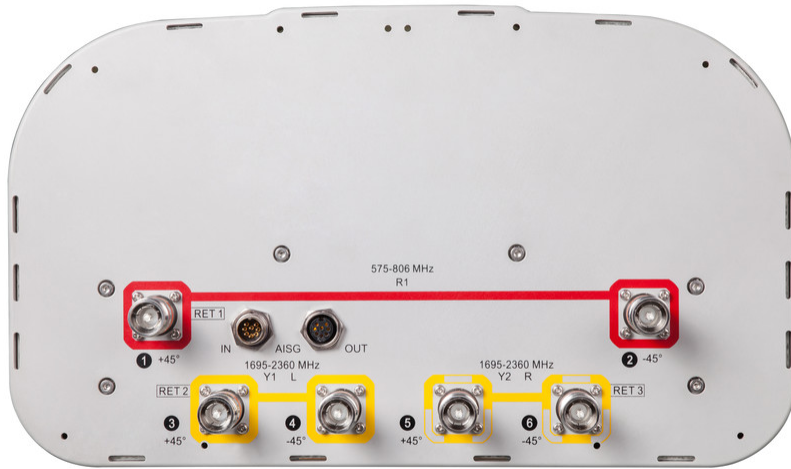


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-806	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2360	5-6	3	ANXXXXXXXXXXXXX3

View from the front of the antenna
(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 617 – 806 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

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

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	250	250	200

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

Mechanical Specifications

Wind Loading @ Velocity, frontal	510.0 N @ 150 km/h (114.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	374.0 N @ 150 km/h (84.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	872.0 N @ 150 km/h (196.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	524.0 N @ 150 km/h (117.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	514 mm 20.236 in
Depth, packed	372 mm 14.646 in
Length, packed	2645 mm 104.134 in
Weight, gross	48.1 kg 106.042 lb

Regulatory Compliance/Certifications

Agency	Classification
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FHH-65C-R3

CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



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

Performance Note	Severe environmental conditions may degrade optimum performance
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