FF2HH-6533C-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
- 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

Antenna Type	Multibeam
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
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	8
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (1)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	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	2438 mm | 95.984 in
Net Weight, antenna only	64.5 kg | 142.198 lb

Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxxxR1
R2	617-894	3-4		
Y1	1695-2360	5-6	2	CPxxxxxxxxxxxxxxxY1
Y2	1695-2360	7-8	3	CPxxxxxxxxxxxxxxxY2
Y3	1695-2360	9-10	4	CPxxxxxxxxxxxxxxxY3
Y4	1695-2360	11-12	5	CPxxxxxxxxxxxxxxxY4

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

Port Configuration

Electrical Specifications

FF2HH-6533C-R5

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 617 – 894 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**617–698**	**698–894**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
Gain, dBi	15.8	16.1	18.9	19.6	20	20.1
Beam Centers, Horizontal, degrees			±27	±27	±27	±27
Beamwidth, Horizontal, degrees	68	65	37	36	34	30
Beamwidth, Vertical, degrees	10.6	8.9	5.2	4.9	4.6	4.2
Beam Tilt, degrees	2–12	2–12	2–10	2–10	2–10	2–10
USLS (First Lobe), dB	17	17	17	19	19	17
Front-to-Back Ratio at 180°, dB	29	32	34	37	36	35
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
Isolation, Beam to Beam, dB			17	17	17	17
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	200	200	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,055.0 N @ 150 km/h (237.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,433.0 N @ 150 km/h (322.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm | 29.606 in
Depth, packed	382 mm | 15.039 in

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Length, packed	2590 mm | 101.969 in
Weight, gross	87.5 kg | 192.904 lb

Regulatory Compliance/Certifications

Agency	Classification
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-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