FFVV-65C-R3-V1

8-port sector antenna, 4x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

- Meets -153dBc 3rd order PIM for 1695-2690MHz, using 2x40W carriers

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
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

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

Dimensions

Width	640 mm | 25.197 in

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Depth	235 mm | 9.252 in
Length	2437 mm | 95.945 in
Net Weight, without mounting kit	53.8 kg | 118.609 lb

Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	ANxxxxxxxxxxxxxxxx1
R2	617-894	3-4		
Y1	1695-2690	5-6	2	ANxxxxxxxxxxxxxxxx2
Y2	1695-2690	7-8	3	ANxxxxxxxxxxxxxxxx3

(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 – 2690 MHz | 617 – 894 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**617–698**	**698–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2500**	**2500–2690**
Gain, dBi	16	16.3	17.6	18	18.6	18.5	18.6
Beamwidth, Horizontal, degrees	65	63	68	65	61	57	61
Beamwidth, Vertical, degrees	10.2	8.5	5.6	5.4	5.1	4.4	4.1
Beam Tilt, degrees	2–13	2–13	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	19	19	20	22	19	18
Front-to-Back Ratio at 180°, dB	30	33	34	38	36	31	32
Front-to-Back Total Power at 180° ± 30°, dB	22	22	28	30	27	26	27
CPR at Boresight, dB	15	15	20	22	19	16	23
CPR at Sector, dB	7	7	6	6	5	6	9
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	28	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	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-153					
PIM, 3rd Order, 2 x 40 W, dBc			-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	200

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.99 m² | 10.656 ft²
Effective Projective Area (EPA), lateral	0.33 m² | 3.552 ft²
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)

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Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	744 mm | 29.291 in
Depth, packed	346 mm | 13.622 in
Length, packed	2566 mm | 101.024 in
Weight, gross	75 kg | 165.347 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

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