

FFVV-65B-R2N23



8-port sector antenna, 4x 617-894 and 4x 1695-2690 MHz, 65° HPBW, 2x RET

- Meets -153dBc 3rd order PIM for 617-894MHz & 1695-2690MHz, using 2x40W carriers
- Equivalent performance designed into a narrower antenna platform
- Improved aerodynamic design allows for reduced wind load
- Reduced weight platform allows for decreased tower loading

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	Aluminum 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 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	Low band (1) Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

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Dimensions

Width	579 mm 22.795 in
Depth	212 mm 8.346 in
Length	1828 mm 71.969 in
Net Weight, antenna only	36 kg 79.366 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	617-894	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	617-894	3 - 4			
Y1	1695-2690	5 - 6	2	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			

(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

	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
RF Port	1-4	1-4	5-8	5-8	5-8	5-8	5-8
Gain, dBi	14.2	15.3	17.7	18	18.2	18.8	19.3
Beamwidth, Horizontal, degrees	69	60	65	63	63	63	55
Beamwidth, Vertical, degrees	15	12.6	5.5	5.3	5.1	4.4	4.1
Beam Tilt, degrees	2-14	2-14	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	15	18	16	17	19	18
Front-to-Back Ratio at 180°, dB	28	30	34	38	37	32	32
Front-to-Back Total Power at 180° ± 30°, dB	21	22	28	30	29	26	26

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Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
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 40 W, dBc	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain by all Beam Tilts, average, dBi	13.9	14.5	17.4	17.6	17.9	18.4	18.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.9	±0.5	±0.4	±0.5	±0.6	±0.5
Beamwidth, Horizontal Tolerance, degrees	±8	±7	±4	±4	±9	±7	±9
Beamwidth, Vertical Tolerance, degrees	±1.4	±1.7	±0.5	±0.4	±0.5	±0.4	±0.3
CPR at Boresight, dB	16	15	19	21	23	17	17
CPR at Sector, dB	8	6	6	7	7	5	7

Mechanical Specifications

Wind Loading @ Velocity, frontal	518.0 N @ 150 km/h (116.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	223.0 N @ 150 km/h (50.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	830.0 N @ 150 km/h (186.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	526.0 N @ 150 km/h (118.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	682 mm 26.85 in
Depth, packed	319 mm 12.559 in
Length, packed	1952 mm 76.85 in
Weight, gross	51 kg 112.436 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value

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ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



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