

FFV4-65C-R6-V2



12-port sector antenna, 4x 617-894 and 8x 1695-2690 MHz, 65° HPBW, 6x RET

- Antenna includes 2x Single Column X-Pol Arrays for 617-894MHz and 4x Single Column X-Pol Arrays for 1695-2690MHz, suitable for 4x MIMO applications

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, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

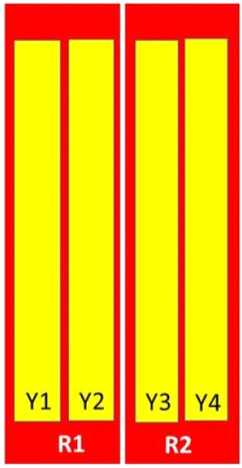
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10-30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

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Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2438 mm 95.984 in
Net Weight, antenna only	39 kg 85.98 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	617-894	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

Left Bottom Right

(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	1,400 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
RF Port	1-4	1-4	5-12	5-12	5-12	5-12	5-12
Gain, dBi	14.8	15.5	16.6	17	17.3	17.6	18
Beamwidth, Horizontal, degrees	65	57	64	65	63	58	57
Beamwidth, Vertical, degrees	10.2	8.7	6.6	6.3	6	5.3	5.1
Beam Tilt, degrees	2–13	2–13	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	18	18	18	19	20	19
Front-to-Back Ratio at 180°, dB	30	31	35	35	33	31	28
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25

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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 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
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	14.4	15	16.2	16.7	17	17.1	17.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.7	±0.3	±0.5	±0.6	±0.6
Beamwidth, Horizontal Tolerance, degrees	±3	±6	±8	±5	±6	±8	±6
Beamwidth, Vertical Tolerance, degrees	±0.5	±1	±0.4	±0.3	±0.4	±0.3	±0.4
USLS, beampeak to 20° above beampeak, dB	18	16	15	15	15	16	15
Front-to-Back Total Power at 180° ± 30°, dB	20	22	27	28	27	23	21
CPR at Boresight, dB	17	16	20	20	20	18	18
CPR at Sector, dB	10	8	9	9	9	4	4

Mechanical Specifications

Wind Loading @ Velocity, frontal	829.0 N @ 150 km/h (186.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	217.0 N @ 150 km/h (48.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,102.0 N @ 150 km/h (247.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	570.0 N @ 150 km/h (128.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2625 mm 103.347 in
Weight, gross	52.3 kg 115.302 lb

Regulatory Compliance/Certifications

Agency	Classification
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CHINA-ROHS	Below maximum concentration value
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-2F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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