

RRZZ2VV-6533D-R8



16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1427–2690 MHz 65° HPBW and 8x 1695–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

- Optional Mounting Kits with mechanical tilt capacity need to be ordered separately
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- "Green" packaging of reduced size and gross weight that uses less material and reduces shipping pollution
- GREEN and High Capacity Antenna Solution

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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

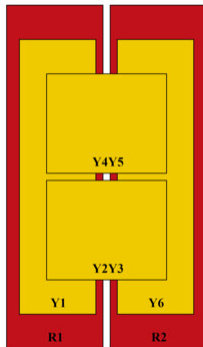
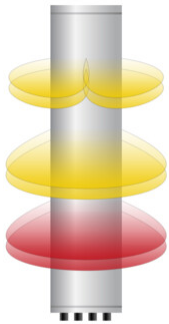
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (6)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2577 mm 101.457 in
Net Weight, antenna only	50 kg 110.231 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	65°	8	AISG1	CPxxxxxxxxxxxxY6

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz 1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,700 W @ 50 °C

Electrical Specifications

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Frequency Band, MHz	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16
Gain at Mid Tilt, dBi	15.4	15.6	15.8	15.2	16.9	17.8	18.5	18.9
Beamwidth, Horizontal, degrees	70	68	65	82	75	68	61	57
Beamwidth, Vertical, degrees	9.5	8.7	8	7.2	5.9	5.3	4.7	4.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	19	17	20	17	17	17	19
Front-to-Back Ratio at 180°, dB	29	29	31	31	32	30	32	33
Front-to-Back Total Power at 180° ± 30°, dB	21	21	20	22	23	23	24	23
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	200	200

Electrical Specifications, BASTA

Frequency	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
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Band, MHz								
Gain by all Beam Tilts, average, dBi	15.3	15.5	15.7	15.1	16.7	17.6	18.2	18.6
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.4	±0.6	±0.7	±0.7	±0.4	±0.6
Beamwidth, Horizontal Tolerance, degrees	±11	±9	±8	±5	±8	±7	±3	±4
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.6	±0.4	±0.4	±0.4	±0.3	±0.3
CPR at Boresight, dB	20	18	16	17	20	20	22	20
CPR at Sector, dB	11	11	11	4	7	5	9	2

Electrical Specifications

Frequency Band, MHz	1710–1995	1920–2300	2300–2500	2490–2690
RF Port	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14
Gain at Mid Tilt, dBi	17.8	19	19.3	19.7
Beamwidth, Horizontal, degrees	35	32	29	26
Beamwidth, Vertical, degrees	7.2	6.5	5.8	5.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	17	16
Front-to-Back Ratio at 180°, dB	34	36	34	33
Front-to-Back Total Power at	28	30	29	28

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**180° ± 30°,
dB**

Isolation, Cross Polarization, dB	25	25	25	25
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Isolation, Inter-band, dB	25	25	25	25
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Isolation, Beam to Beam, dB	17	17	17	17
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VSWR Return loss, dB	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
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Input Power per Port at 50°C, maximum, watts	200	200	200	200
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Electrical Specifications, BASTA

Frequency Band, MHz	1710–1995	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	17.6	18.8	19.1	19.4
Gain by all Beam Tilts Tolerance, dB	±1.1	±0.9	±0.8	±0.7
Beamwidth, Horizontal Tolerance, degrees	±3	±3	±2	±2
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.3	±0.3
CPR at Boresight, dB	16	20	21	20

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CPR at 10 dB	9	12	13	12
Horizontal Beamwidth, dB				

Mechanical Specifications

Wind Loading @ Velocity, frontal	899.0 N @ 150 km/h (202.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	278.0 N @ 150 km/h (62.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,076.0 N @ 150 km/h (241.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	619.0 N @ 150 km/h (139.2 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	2764 mm 108.819 in
Weight, gross	66 kg 145.505 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-3F	-	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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