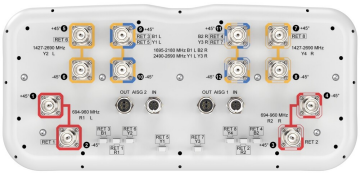
RRZZVV-65D-R8N43D



12-port sector antenna, 4x 694–960, 4x 1427–2690 and 4x 1695-2690 MHz, 65° HPBW, 8x RET

- Independent Tilt DIPLEXED Antenna for 1800/2100 and for 2600 MHz when used with 4T4R multi-band radios
- Optimized Antenna to deliver high Pattern Efficiency for improved coverage area and capacity for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Retractable tilt indicator rods
- Innovative aerodynamic shape optimized for reduced wind loading in every direction

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

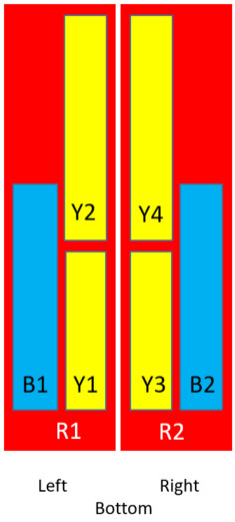
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) | Mid band (6)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

RRZZVV-65D-R8N43D

Dimensions

Width	430 mm | 16.929 in
Depth	197 mm | 7.756 in
Length	2769 mm | 109.016 in
Net Weight, antenna only	43.6 kg | 96.121 lb

Array Layout

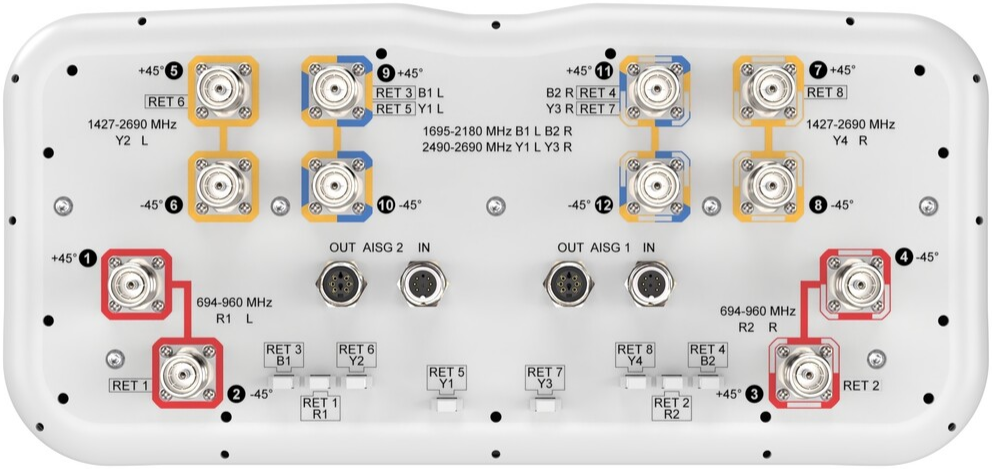


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxR2
B1	1695-2180	9-10	3	CPxxxxxxxxxxxxxxxB1
B2	1695-2180	11-12	4	CPxxxxxxxxxxxxxxxB2
Y1	2490-2690	9-10	5	CPxxxxxxxxxxxxxxxY1
Y2	1427-2690	5-6	6	CPxxxxxxxxxxxxxxxY2
Y3	2490-2690	11-12	7	CPxxxxxxxxxxxxxxxY3
Y4	1427-2690	7-8	8	CPxxxxxxxxxxxxxxxY4

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

Port Configuration

RRZZVV-65D-R8N43D



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y2,Y4	Y2,Y4	Y2,Y4	Y2,Y4	Y2,Y4	B1,B2	B1,B2	Y1,Y3
Frequency Band, MHz	**698–806**	**790–894**	**890–960**	**1427–1518**	**1695–1995**	**1920–2300**	**2300–2500**	**2490–2690**	**1695–1995**	**1920–2180**	**2490–2690**
RF Port	1-4	1-4	1-4	5-8	5-8	5-8	5-8	5-8	9-12	9-12	9-12
Gain at Mid	15.5	16.1	16.3	15.1	17	17.7	18.6	18.3	17	17.6	18.2

Tilt, dBi											
Beamwidth, Horizontal, degrees	73	61	59	70	61	57	53	58	70	68	56
Beamwidth, Vertical, degrees	7.6	6.9	6.4	8.1	6.5	5.8	5.1	4.7	5.5	5.1	5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	17	17	18	18	17	15	15	15	17
Front-to-Back Ratio at 180°, dB	30	31	29	32	35	35	35	35	33	30	30
Front-to-Back Total Power at 180° ± 30°, dB	22	22	21	23	29	29	29	29	25	25	25
Isolation, Cross Polarization, dB	27	27	27	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	27	27	27	26	26	26	26	26	26	26	26
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	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	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**790–894**	**890–960**	**1427–1518**	**1695–1995**	**1920–2300**	**2300–2500**	**2490–2690**	**1695–1995**	**1920–2180**	**2490–2690**
Gain by all Beam Tilts, average, dBi	15.4	16	16.2	15.1	16.9	17.6	18.4	18	16.9	17.5	18

USLS, beampeak to 20° above beampeak, dB	14	14	14	13	16	14	14	13	14	14	15
CPR at Boresight, dB	20	19	15	16	19	14	18	15	20	21	21
CPR at Sector, dB	13	10	6	3	7	4	4	5	10	8	1

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	511 mm | 20.118 in
Depth, packed	318 mm | 12.52 in
Length, packed	2890 mm | 113.78 in
Weight, gross	58.3 kg | 128.529 lb

Regulatory Compliance/Certifications

Agency	**Classification**
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UK-ROHS	Compliant/Exempted

Included Products

BSAMNT-3F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance