RRZZVV-65D-R6N47G

12-port sector antenna, 4x 694-960,4x 1427–2690 and 4x 1695- 2690 MHz, 65° HPBW, 6x RET

- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Reduces the amount of aluminum used to minimize CO2 release
- SEED® antenna providing high gain and improved efficiency
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area
- Retractable tilt indicator rods
- Includes integrated GPS (APS-XT-GPS)

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 (4)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	468 mm | 18.425 in

RRZZVV-65D-R6N47G

Depth	228 mm | 8.976 in
Length	2769 mm | 109.016 in
Net Weight, without mounting kit	42 kg | 92.594 lb

Array Layout

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1or2	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1or2	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1or2	CPxxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1or2	CPxxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	AISG1or2	CPxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	6	AISG1or2	CPxxxxxxxxxxxxxxY4

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

Port Configuration

RRZZVV-65D-R6N47G

Logo Image

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,800 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
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	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10
Gain at Mid Tilt, dBi	16.5	17.2	17.4	17.1	18.3	19.1	19.6	20.1
Beamwidth, Horizontal, degrees	72	68	66	64	69	64	62	54
Beamwidth, Vertical, degrees	7.5	6.8	6.2	7.2	5.8	5.2	4.7	4.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	17	15	16	16	15	18	17
Front-to-Back Ratio at 180°, dB	32	32	32	30	37	38	37	40
Front-to-Back Total Power at 180° ± 30°, dB	21	23	22	22	28	30	29	29
CPR at Boresight, dB	23	27	24	22	22	20	17	19
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	300	300	300	250	250	250	200	200

Electrical Specifications

	Y1,Y4	**Y1,Y4**	**Y1,Y4**	**Y1,Y4**
Frequency Band, MHz	**1695–1995**	**1920–2300**	**2300–2500**	**2490–2690**
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Gain at Mid Tilt, dBi	17.9	18.6	19.3	20
Beamwidth, Horizontal, degrees	73	70	65	57
Beamwidth, Vertical, degrees	5.9	5.3	4.7	4.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	18	18
Front-to-Back Ratio at 180°, dB	36	34	36	37
Front-to-Back Total Power at 180° ± 30°, dB	28	28	26	25
CPR at Boresight, dB	22	22	18	20
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR | Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	250	250	200	200

Mechanical Specifications

BASTA Version, mechanical	BASTA v12
Wind Loading @ Velocity, frontal	547.0 N @ 150 km/h (123.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	470.0 N @ 150 km/h (105.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	976.0 N @ 150 km/h (219.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	583.0 N @ 150 km/h (131.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	566 mm | 22.283 in

RRZZVV-65D-R6N47G

Depth, packed	380 mm | 14.961 in
Length, packed	3001 mm | 118.15 in
Weight, gross	57 kg | 125.663 lb

Regulatory Compliance/Certifications

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

Included Products

BSAMNT-2F	–	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