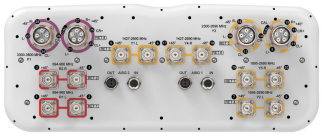
RRZZVVT4S4-65DR8V2



28-port sector antenna, 4x 694–960, 4x 1427-2690 and 4x 1695- 2690 MHz 65° HPBW, 8x 2300–2690 and 8x 3300-3800MHz, 90° HPBW, 8x RET

- Also includes 1x 4-Column Array for 2300-2690 MHz and a separate 1x 4-Column Array for 3300-3800MHz. Column spacing optimized to support Soft Split Beamforming
- Includes MQ4/MQ5 type cluster connector(s)
- Includes eight Internal RET's
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- New end cap shape for additional wind load reduction

General Specifications

Antenna Type	Sector- and beamforming
Band	Multiband
Calibration Connector Interface	MQ5
Calibration Connector Quantity	2
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 | MQ4 | MQ5
RF Connector Location	Bottom
RF Connector Quantity, high band	16
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	28

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

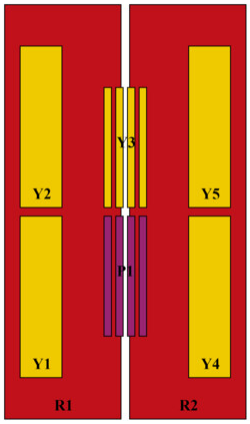
RRZZVVT4S4-65DR8V2

Input Voltage	10–30 Vdc
Internal RET	High band (2) | Low band (2) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, without mounting kit	59.4 kg | 130.954 lb

Array Layout

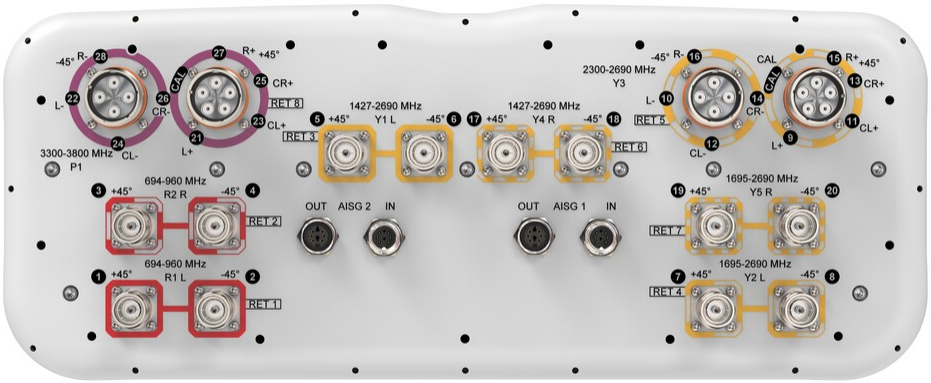


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY2
Y3	2300-2690	9 - 16	5	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1427-2690	17 - 18	6	AISG1	CPxxxxxxxxxxxxxxY4
Y5	1695-2690	19 - 20	7	AISG1	CPxxxxxxxxxxxxxxY5
P1	3300-3800	21 - 28	8	AISG1	CPxxxxxxxxxxxxxxP1

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

Port Configuration

RRZZVVT4S4-65DR8V2



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 1695 – 2690 MHz | 2300 – 2690 MHz | 3300 – 3800 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2300–2690**	**2300–2690**	**3300–3800**
Gain, dBi	15.7	16	16.1	14.9	16.8	17.8	16.3	15.9
Beamwidth, Horizontal, degrees	72	66	63	79	70	60	90	89
Beamwidth, Vertical, degrees	8.8	7.8	7.2	9.2	7.1	5.5	4.8	6.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	19	23	25	21	23	19	16
Front-to-Back Ratio at 180°, dB	34	30	29	35	32	31	31	29
Coupling level, Amp, Antenna port to Cal port, dB							26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB							±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB							0.9	0.9
Coupler, max Phase Δ,							7	9

Antenna port to Cal port, degrees								
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25
Isolation, Inter-band, dB	28	28	28	25	25	25	28	28
Isolation, Co-polarization, dB							20	20
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	-150	-150	-150	-150	-150	-150	-130	-130
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	150	75

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2300–2690**	**2300–2690**	**3300–3800**
Gain by all Beam Tilts, average, dBi	15.4	15.7	15.9	14.6	16.1	17.3	15.7	15.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.3	±0.5	±0.9	±0.5	±0.7	±1
Beamwidth, Horizontal Tolerance, degrees	±5.5	±3.3	±3.8	±6.5	±7.5	±5.8	±12.2	±21.6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.3	±0.4	±0.9	±0.5	±0.3	±0.6
USLS, beampeak to 20° above beampeak, dB	15	14	15	15	16	15	16	13
Front-to-Back Total Power at 180° ± 30°, dB	22	21	21	25	25	26	23	21
CPR at Boresight, dB	18	19	19	18	19	19	15	16
CPR at Sector, dB	11	7	10	6	5	3	9	7

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**2300–2690**	**3300–3800**
Gain, dBi	18.2	17.9
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	4.9	6.5
Front-to-Back Total Power at 180° ± 30°, dB	27	25
USLS (First Lobe), dB	18	17

Electrical Specifications, Service Beam

Frequency Band, MHz	**2300–2690**	**3300–3800**

Steered 0° Gain, dBi	21.2	20.3
Steered 0° Beamwidth, Horizontal, degrees	25	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	32	28
Steered 0° Horizontal Sidelobe, dB	13	12
Steered 30° Gain, dBi	20.4	19.7
Steered 30° Beamwidth, Horizontal, degrees	29	27
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	31	27

Electrical Specifications, Soft Split

Frequency Band, MHz	**2300–2690**	**3300–3800**
Gain, dBi	20.2	19.5
Beamwidth, Horizontal, degrees	32	30
Front-to-Back Total Power at 180° ± 30°, dB	33	29
Horizontal Sidelobe, dB	21	16

Mechanical Specifications

Wind Loading @ Velocity, frontal	970.0 N @ 150 km/h (218.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,162.0 N @ 150 km/h (261.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	667.0 N @ 150 km/h (149.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	597 mm | 23.504 in
Depth, packed	349 mm | 13.74 in
Length, packed	2829 mm | 111.378 in
Weight, gross	80 kg | 176.37 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-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.
BSAMNT-M4	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance