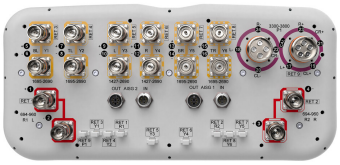
RRZZV4S4-65DR9NV4



24-port sector antenna, 4x 694-960, 4x 1427-2690, 8x 1695-2690 MHz, 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 9x RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port
- Antenna shape optimized for wind load reduction
- S4 array uses MQ cluster connectors
- Retractable tilt indicator rods
- Includes nine internal RET's

General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	MQ5
Calibration Connector Quantity	1
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	8
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	24

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	High band (1) | Low band (2) | Mid band (6)

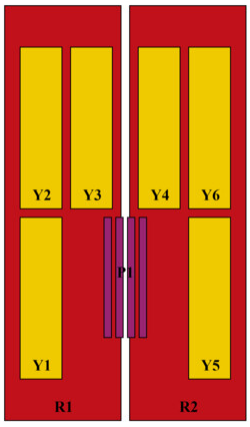
RRZZV4S4-65DR9NV4

Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	430 mm | 16.929 in
Depth	197 mm | 7.756 in
Length	2769 mm | 109.016 in
TDD Column Spacing	42 mm | 1.654 in

Array Layout

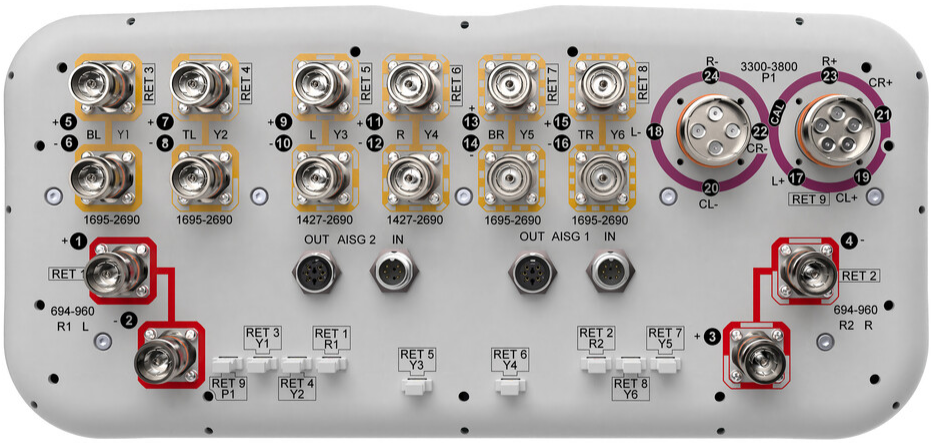


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxY6
P1	3300-3800	17 - 24	9	AISG1	CPxxxxxxxxxxxxxxP1

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

Port Configuration

RRZZV4S4-65DR9NV4



Electrical Specifications

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

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y3,Y4	Y3,Y4	Y3,Y4	Y1,Y2,Y5,Y6	Y1,Y2,Y5,Y6	P1
Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1427–1518**	**1695–2200**	**2300–2690**	**1695–2200**	**2300–2690**	**3300–3800**
RF Port	1-4	1-4	1-4	9-12	9-12	9-12	5-8,13-16	5-8,13-16	17-24
Gain, dBi	15.6	16.2	16.4	15.5	17.3	18.3	17.1	17.9	15.7
Beamwidth, Horizontal, degrees	63	56	53	64	68	59	68	61	84
Beamwidth, Vertical, degrees	7.6	6.8	6.3	7	5.5	4.4	6	4.8	6.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	16	17	16	16	18	15	18	16
Front-to-Back Ratio at 180°, dB	34	33	31	32	32	32	30	32	28

Coupling level, Amp, Antenna port to Cal port, dB									26
Coupling level, max Amp Δ, Antenna port to Cal port, dB									±2
Coupler, max Amp Δ, Antenna port to Cal port, dB									0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees									7
Isolation, Cross Polarization, dB	27	27	27	26	26	26	27	27	25
Isolation, Inter-band, dB	27	27	27	25	26	26	27	27	25
Isolation, Co-polarization, dB									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	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-130
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	150	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3800**
Gain, dBi	18.2
Beamwidth, Horizontal, degrees	65
Beamwidth, Vertical, degrees	6.3
Front-to-Back Total Power at 180° ± 30°, dB	26
USLS (First Lobe), dB	19

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3800**
Steered 0° Gain, dBi	20.9
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29
Steered 0° Horizontal Sidelobe, dB	15

Steered 30° Gain, dBi	19.5
Steered 30° Beamwidth, Horizontal, degrees	29
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26

Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3800**
Gain, dBi	19.7
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	27
Horizontal Sidelobe, dB	17

Mechanical Specifications

Wind Loading @ Velocity, frontal	651.0 N @ 150 km/h (146.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	351.0 N @ 150 km/h (78.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,028.0 N @ 150 km/h (231.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	421.0 N @ 150 km/h (94.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm | 20.866 in
Depth, packed	356 mm | 14.016 in
Length, packed	2897 mm | 114.055 in
Weight, gross	75 kg | 165.347 lb
Weight, net	53.8 kg | 118.609 lb

Regulatory Compliance/Certifications

Agency	**Classification**
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

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