

EGRZV4S4-65D-R9N43



24-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 694-960 (R3), 8x 1695-2690 (Y1-Y2/Y4-Y5) & 2x 1427-2690 (Y3) MHz, 65° HPBW and 8x 3300-3800 (P1) MHz, 90° HPBW, 9x RET.

- Includes 1x 4-Column Array for 3300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Retractable tilt indicator rods
- S4 array uses MQ cluster connectors
- Includes nine 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
- Antenna shape optimized for wind load reduction

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	10
RF Connector Quantity, low band	6
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

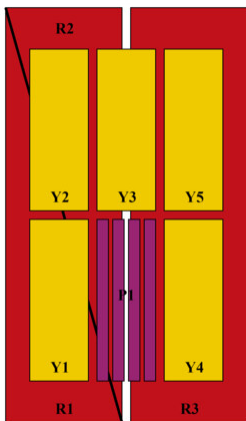
EGRZV4S4-65D-R9N43

Input Voltage	10–30 Vdc
Internal RET	High band (1) Low band (3) Mid band (5)
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
Net Weight, antenna only	59 kg 130.073 lb
TDD Column Spacing	42 mm 1.654 in

Array Layout

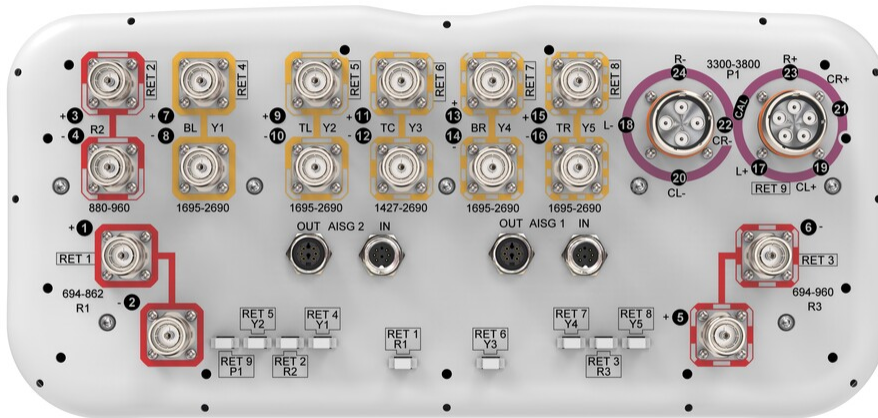


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY5
P1	3300-3800	17 - 24	9	AISG1	CPxxxxxxxxxxxxxxxxP1

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

Port Configuration

EGRZV4S4-65D-R9N43



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz 1695 – 2690 MHz 3300 – 3800 MHz 694 – 862 MHz 694 – 960 MHz 880 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1	R2	R3	Y1-Y2/Y4-Y5	Y1-Y2/Y4-Y5	Y3	Y3	P1	
Frequency Band, MHz	694-862	880-960	694-960	1695-2200	2300-2690	1427-1518	1695-2180	2300-2690	3300-3800
RF Port	1,2	3,4	5,6	7-10,13-16	7-10,13-16	11,12	11,12	11,12	17-24
Gain, dBi	15.8	16.3	16.4	17.4	18	16.4	17.7	18.2	16
Beamwidth, Horizontal, degrees	60	54	58	60	59	58	56	63	83
Beamwidth, Vertical, degrees	7.4	6.4	7	6.2	5	7.2	5.6	4.3	6.2
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	16	17	15	15	16	23	20	20	16
Front-to-Back Ratio at 180°, dB	34	31	31	32	32	33	31	32	29
Coupling level, Amp,									26

EGRZV4S4-65D-R9N43

Antenna port to Cal port, dB									
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	27	27	26	26	26	25
Isolation, Inter-band, dB	27	27	27	27	27	27	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	300	300	300	250	200	250	250	200	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800
Gain, dBi	17.9
Beamwidth, Horizontal, degrees	65
Beamwidth, Vertical, degrees	6.2
Front-to-Back Total Power at 180° ± 30°, dB	25
USLS (First Lobe), dB	20

Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800
Steered 0° Gain, dBi	20.8
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	30

EGRZV4S4-65D-R9N43

Steered 0° Horizontal Sidelobe, dB	15
Steered 30° Gain, dBi	19.5
Steered 30° Beamwidth, Horizontal, degrees	28
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	27

Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800
Gain, dBi	19.5
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	29
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	80 kg 176.37 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

EGRZV4S4-65D-R9N43

UK-ROHS

Compliant



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