RRZZS4-65D-R5

16-port sector antenna, 4x 694–960, 4x 1427–2690 MHz, 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 5x RET

- Combination of Quad Band antenna and 3.5GHz 8T8R beam forming antenna
- Internal SBT RET support via Calibration Port of 3.5GHz array
- Beam-forming weighting table available upon request
- Optimized for Software Defined Split Six Sector applications on 3.5GHz
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type	Sector
Band	Multiband
Calibration Connector Interface	N Female
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 | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	12
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

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

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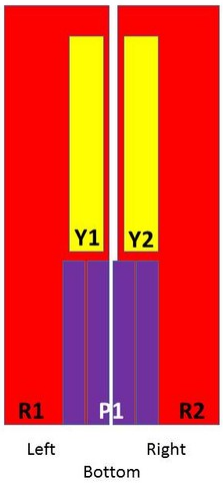
Input Voltage	10–30 Vdc
Internal RET	High band (3) | Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, without mounting kit	47 kg | 103.617 lb
TDD Column Spacing	42 mm | 1.654 in

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxR1
R2	695-960	3-4	2	CPxxxxxxxxxxxxxxxR2
Y1	1427-2690	5-6	3	CPxxxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxY2
P1	3300-3800	9-16	5	CPxxxxxxxxxxxxxxxP1

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

Port Configuration

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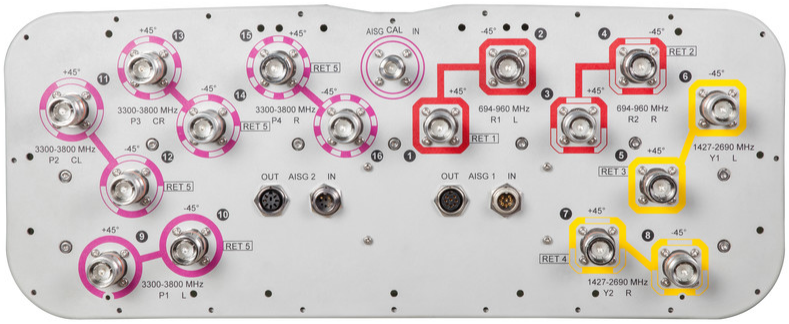

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 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	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2	P1
Frequency Band, MHz	**694–790**	**790–862**	**880–960**	**1427–1518**	**1695–1920**	**1920–2180**	**2300–2690**	**3300–3800**
Gain, dBi	15.9	16.3	16.8	15.3	17.1	17.6	17.7	16.5
Beamwidth, Horizontal, degrees	70	67	63	68	57	58	62	86
Beamwidth, Vertical, degrees	8.4	7.6	6.9	8.7	7.2	6.5	5.3	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	14	17	19	17	18	17	17	16
Front-to-Back Ratio at 180°, dB	31	30	32	33	35	36	33	30
Coupling level, Amp, Antenna port to Cal port, dB								26
Coupling level, max Amp Δ,								±2

Antenna port to Cal port, dB								
Coupler, max Amp Δ, Antenna port to Cal port, dB								1.8
Coupler, max Phase Δ, Antenna port to Cal port, degrees								14
Isolation, Cross Polarization, dB	28	28	28	27	28	28	28	25
Isolation, Inter-band, dB	28	28	28	28	28	28	28	19
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	-150	-145
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	150	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3800**
Gain, dBi	16.5
Beamwidth, Horizontal, degrees	62
Beamwidth, Vertical, degrees	6.5
USLS (First Lobe), dB	16

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3800**
Steered 0° Gain, dBi	20.9
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Horizontal Sidelobe, dB	13
Steered 30° Gain, dBi	19.5
Steered 30° Beamwidth, Horizontal, degrees	31

Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3800**
Gain, dBi	19.8
Beamwidth, Horizontal, degrees	31
Horizontal Sidelobe, dB	18

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Mechanical Specifications

Mechanical Tilt Range	0°–10°
Wind Loading @ Velocity, frontal	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	880.0 N @ 150 km/h (197.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	309 mm | 12.165 in
Length, packed	2935 mm | 115.551 in
Weight, gross	68 kg | 149.914 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