

16-port sector antenna, 2x 698–960, 6x 1710-2690MHz, 65° HPBW, and 8x 2300-2690MHz, 80° HPBW, 5x RET

- Combination of Penta-Band antenna and 2.4/2.6 GHz 8T8R beam forming antenna
- Beamforming array utilizes MQs cluster connectors
- Optimized for Software Defined Split Six Sector applications on 2.4/2.6 GHz
- Antenna with tilt scale indicators and integrated pluggable RET

General Specifications

Antenna Type Sector and beamforming

Band Multiband
Calibration Connector Interface MQ5 Male

Calibration Connector Quantity

Color Light Gray (RAL 7035)

Grounding TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 7-16 DIN Female | MQ4 Male | MQ5 Male

RF Connector Location

RF Connector Quantity, mid band

RF Connector Quantity, low band

2

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 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET Low band (1) | Mid band (4)

Power Consumption, active state, maximum 10 W

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Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

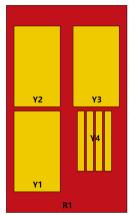
 Width
 397 mm | 15.63 in

 Depth
 197 mm | 7.756 in

 Length
 2647 mm | 104.213 in

 Net Weight, antenna only
 28.5 kg | 62.832 lb

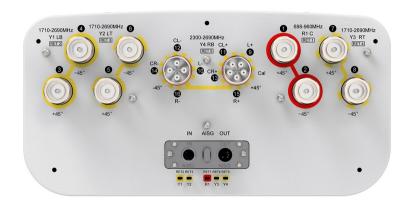
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	RET UID
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxR1
Y1	1710-2690	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxXY1
Y2	1710-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY2
Y3	1710-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxXY3
Y4	2300-2690	9 - 16	BF°	5	AISG1	CPxxxxxxxxxxxxx4

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1710 – 2690 MHz | 2300 – 2690 MHz | 698 – 960 MHz

 ${\bf Polarization} \hspace{1.5cm} \pm 45^{\circ}$ ${\bf Total Input Power, maximum} \hspace{1.5cm} 900 \ W$

Electrical Specifications

	R1	R1	R1	Y1-Y3	Y1-Y3	Y1-Y3	Y1-Y3	Y1-Y3
Frequency Band, MHz	698-806	790-894	880-960	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
RF Port	1,2	1,2	1,2	3-8	3-8	3-8	3-8	3-8
Gain, dBi	17	17.4	17.4	17	17.2	17.6	18.2	18.6
Beamwidth, Horizontal, degrees	62	64	68	65	66	66	62	55
Beamwidth, Vertical, degrees	8.4	7.8	7.5	7.5	7.2	6.8	6.1	5.6
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	17	15	16	15	16	17
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	24	30	33	28	28	30	31	29

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Isolation, Cross Polarization, dB	26	26	26	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28	28
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	-150
Input Power per Port, maximum, watts	250	250	250	200	200	200	200	200

Electrical Specifications

	Y4	Y4
Frequency Band, MHz	2300-2400	2490-2690
RF Port	9-16	9-16
Gain, dBi	16.3	16.7
Beamwidth, Horizontal, degrees	83	79
Beamwidth, Vertical, degrees	5.9	5.5
Beam Tilt, degrees	2-12	2-12
USLS (First Lobe), dB	16	17
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	26
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	1	1
Coupler, max Phase Δ , Antenna port to Cal port, degrees	9	9
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0
Input Power per Port, maximum, watts	50	50

Electrical Specifications, Broadcast 65°

Frequency Band, MHz 2300-2400 2490-2690

Gain, dBi 17.8 18

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Beamwidth, Horizontal at 3 dB, degrees	65	65
Beamwidth, Vertical, degrees	6	5.5
CPR at Boresight, dB	23	18
USLS (First Lobe), dB	22	21

Electrical Specifications, Service Beam

Frequency Band, MHz	2300-2400	2490-269
Steered 0° Gain, dBi	21.4	21.6
Steered 0° Beamwidth, Horizontal, degrees	24	22
Steered 0° Horizontal Sidelobe, dB	13	12
Steered 0° USLS (First Lobe), dB	19	21
Steered 30° Gain, dBi	19.9	20.2
Steered 30° Beamwidth, Horizontal, degrees	27	24

Electrical Specifications, Soft Split

Frequency Band, MHz	2300-2400 2490-2690			
Gain, dBi	20	20.2		
Beamwidth, Horizontal, degrees	30	26		
USLS (First Lobe), dB	19	20		

Mechanical Specifications

Wind Loading @ Velocity, frontal	864.0 N @ 150 km/h (194.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	398.0 N @ 150 km/h (89.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	373.0 N @ 150 km/h (83.9 lbf @ 150 km/h)
W. 10 1 '	000 / /104

Wind Speed, maximum 200 km/h (124 mph)

Packaging and Weights

Width, packed	492 mm 19.37 in
Depth, packed	317 mm 12.48 in
Length, packed	2847 mm 112.087 in
Weight, gross	41.5 kg 91.492 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.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



Included Products

BSAMNT-B95-03 – 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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

