

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

- Includes two planar arrays with separate calibration ports for each array for use in beamforming systems covering all TDD bands
- Optimized for software defined split six sector applications
- Eight internal RETs control the antenna arrays
- 4 M-LOC cluster connectors for the two planar beamforming arrays
- New aerodynamic endcaps for wind load optimization

General Specifications

Antenna Type Sector

Band Multiband

Calibration Connector Interface M-LOC

Calibration Connector Quantity 2

Color Light Gray (RAL 7035)

Grounding TypeRF 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 EN1991-1-4 standard

Radome Material Fiberglass, UV resistant

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female | M-LOC

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, mid band

RF Connector Quantity, low band

4

RF Connector Quantity, total

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 (5)

Power Consumption, idle state, maximum 1 W

Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

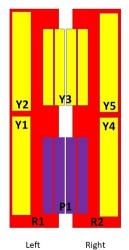
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 2688 mm | 105.827 in

Net Weight, antenna only 59.4 kg | 130.954 lb

Array Layout



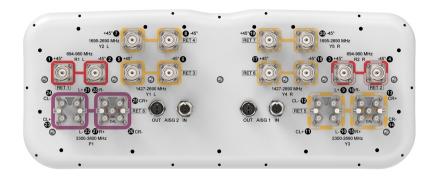
			1	
R1	694-960	1-2	1	CPxxxxxxxxxxxxxXR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxR2
Y1 1	427-2690	5-6	3	CPxxxxxxxxxxxxxY1
Y2 1	695-2690	7-8	4	CPxxxxxxxxxxxxxY2
Y3 2	300-2690	9-16	5	CPxxxxxxxxxxxxxXY3
Y4 1	427-2690	17-18	6	CPxxxxxxxxxxxxxY4
Y5 1	695-2690	19-20	7	CPxxxxxxxxxxxxxY5
P1 3	300-3800	21-28	8	CPxxxxxxxxxxxxxP1

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

Port Configuration

Bottom





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 $^{\circ}$ C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2,Y4,Y	5Y1,Y2,Y4,Y	5Y1,Y4	Y3	P1
Frequency Band, MHz	694-790	790-890	890-960	1695-218	0 2300-2690	1427-1518	3 2300-2690	3300-3800
RF Port	1-4	1-4	1-4	5-8,17-20	5-8,17-20	5,6,17,18	9-16	21-28
Gain, dBi	15.7	16	16.1	16.8	17.8	14.9	16.3	15.9
Beamwidth, Horizontal, degrees	72	66	63	70	60	79	90	89
Beamwidth, Vertical, degrees	8.8	7.8	7.2	7.1	5.5	9.2	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	21	23	25	19	16
Front-to-Back Ratio at 180°, dB	34	30	29	32	31	35	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

Page 3 of 6



Coupler, max Phase Δ, Antenna port to Cal port, degrees							7	9
CPR at Boresight, dB	18	19	19	19	19	18	15	16
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	-150	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	250	200	250	150	75
Electrical Specificati	ions, Br	oadcast	: 65°					
Frequency Band, MHz							2300-26	90 3300-3800
Gain, dBi							17.4	16.4
Beamwidth, Horizontal, degrees							59	60
Beamwidth, Vertical, degrees							4.8	6.5
Front-to-Back Total Power at 180° ± 30°, dB							28	24
USLS (First Lobe), dB							18	16
Electrical Specificati	ions, Se	rvice Be	eam					
Frequency Band, MHz							2300-26	90 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

Electrical Specifications, Soft Split

Steered 30° Beamwidth,

Steered 30° Front-to-Back

Total Power at 180° ± 30°, dB

Horizontal, degrees

Frequency Band, MHz 2300-2690 3300-3800

Page 4 of 6

27

27

29

31

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
 944.0 N @ 150 km/h (212.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 292.0 N @ 150 km/h (65.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,130.0 N @ 150 km/h (254.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 650.0 N @ 150 km/h (146.1 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
 80.4 kg | 177.251 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-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

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Performance Note

Severe environmental conditions may degrade optimum performance

