

20-port sector antenna, 4x 698-896 and 8x 1695-2360 MHz, 65° HPBW, and 8x 3400-4000 MHz, 90° HPBW, 4x RET

- Multi-band FDD antenna featuring C-Band 8T8R functionality
- Includes a separate RET for C-band array
- Feature the same dimensions as existing 8 and 12-port FDD capable antennas
- New endcap designs provide improved wind loading performance

General Specifications

Antenna Type Sector- and beamforming

Band Multiband

Calibration Connector Interface 4.3-10 Female

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 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, mid band 8
RF Connector Quantity, low band 4
RF Connector Quantity, total 20

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 4 female | 4 male

Input Voltage 10-30 Vdc

Internal RET High band (1) | Low band (2)

COMMSCOPE®

Protocol 3GPP/AISG 2.0

Dimensions

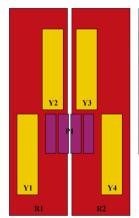
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 1848 mm | 72.756 in

Net Weight, antenna only 41.1 kg | 90.61 lb

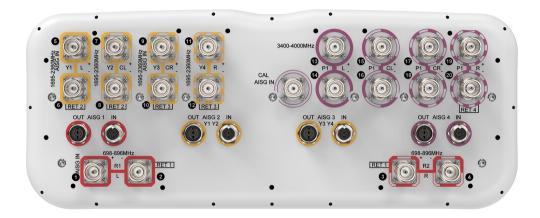
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID		
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxR1		
R2	698-896	3 - 4	'	AISGI			
Y1	1695-2360	5 - 6	2	AISG2	CPxxxxxxxxxxxxxY1		
Y2	1695-2360	7 - 8	2		CPXXXXXXXXXXXXXX		
Y3	1695-2360	9 - 10	_	AICC2	60		
Y4	1695-2360	11 - 12	3	AISG3	CPxxxxxxxxxxxxxXY3		
P1	3400-4000	13 - 20	4	AISG4	CPxxxxxxxxxxxxxxP1		

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

Port Configuration



Electrical Specifications



Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 3400 – 4000 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 1,500 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698-806	806-896	1695-188	0 1850-199	0 1920-218	0 2300-236	0 3400-355	0 3700-4000
Gain, dBi	14.3	15	15.5	16	16.5	16.7	15.6	16.3
Beamwidth, Horizontal, degrees	73	65	67	66	62	60	91	74
Beamwidth, Vertical, degrees	12.1	10.5	9.2	8.7	8.3	7.4	6.2	5.6
Beam Tilt, degrees	2-14	2-14	2-12	2-12	2-12	2-12	0-10	0-10
USLS (First Lobe), dB	19	18	17	17	18	21	16	15
Front-to-Back Ratio at 180°, dB	30	27	34	34	36	36	30	31
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
Coupler, max Phase Δ , Antenna port to Cal port, degrees							7	7
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	19	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	-153	-153	-153	-153	-153	-153	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	698-806	806-896	1695-188	0 1850–199	0 1920–218	0 2300-236	0 3400-355	0 3700-4000
Gain by all Beam Tilts, average, dBi	14	14.7	15	15.6	16.1	16.4	15	15.7
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.6	±0.6	±0.7	±0.4	±0.6	±0.7
Gain by Beam Tilt, average,	2° 14.2	2° 14.7	2° 15.1	2° 15.6	2° 16.1	2° 16.4	0° 14.7	0° 15.6

Page 3 of 6



dBi	8° 14.1 14° 13.8	8° 14.9 14° 14.6	7 ° 15.1 12 ° 14.8	7 ° 15.7 12 ° 15.5	7° 16.2 12° 15.9	7° 16.5 12° 16.0	5° 15.2 10° 15.2	5° 15.9 10° 15.4
Beamwidth, Horizontal Tolerance, degrees	±5.9	±2.8	±6.3	±7.7	±6.6	±4.2	±21.4	±12.6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.5	±0.6	±0.5	±0.6	±0.3	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	19	17	16	16	17	17	14	12
Front-to-Back Total Power at 180° ± 30°, dB	21	21	26	24	27	27	23	23
CPR at Boresight, dB	21	23	19	18	20	20	14	14
CPR at Sector, dB	12	9	9	6	7	8	6	6
Electrical Specification	ons, Bro	padcast	65°					
Frequency Band, MHz							3400-355	50 3700-4000
Gain, dBi							17.2	18.4
Beamwidth, Horizontal, degrees							65	65
Beamwidth, Vertical, degrees							6.1	5.7
USLS (First Lobe), dB							18	21
Electrical Specification	ons, En	velope l	Pattern					
Frequency Band, MHz							3400-355	50 3700-4000
Gain, dBi							20.6	21
Electrical Specification	ons, Sei	vice Be	am					
Frequency Band, MHz							3400-355	50 3700-4000
Steered 0° Gain, dBi							20.6	20.9
Steered 0° Beamwidth, Horizontal, degrees							24	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB							30	31
Steered 0° Horizontal Sidelobe, dB							13	12
Steered 30° Gain, dBi							19.1	20
Steered 30° Beamwidth, Horizontal, degrees							32	26
Electrical Specification	ons, Sot	ft Split						

Page 4 of 6

3400-3550 3700-4000

Frequency Band, MHz

Gain, dBi	18.9	19.9
Beamwidth, Horizontal, degrees	37	27
Front-to-Back Total Power at 180° ± 30°, dB	27	29
Horizontal Sidelobe, dB	14	12

0.59 m² | 6.351 ft²

433.0 N @ 150 km/h (97.3 lbf @ 150 km/h)

Mechanical Specifications

Effective Projective Area (EPA), frontal

Effective Frojective Area (El A), frontai	0.00111
Effective Projective Area (EPA), lateral	0.18 m² 1.938 ft²
Wind Loading @ Velocity, frontal	629.0 N @ 150 km/h (141.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	191.0 N @ 150 km/h (42.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	755.0 N @ 150 km/h (169.7 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

Wind Loading @ Velocity, rear

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2035 mm | 80.118 in

 Weight, gross
 54.9 kg | 121.034 lb

Regulatory Compliance/Certifications

Agency Classification

CE Compliant with the relevant CE product directives

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-3 – 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.

Page 5 of 6

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance