

16-port sector antenna, 4x 698-896 MHz and 4x 1695-2360 MHz, 65° HPBW, and 8 x 3400-4000 MHz, 90° HPBW, 5 x RETs

- Multi-band FDD antenna featuring C-Band 8T8R functionality
- The C-band RET is factory set to AISG2. All other RET assigned to AISG1
- 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 Material Fiberglass, UV resistant

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band
RF Connector Quantity, mid band

RF Connector Quantity, low band

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

Input Voltage 10-30 Vdc

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

Power Consumption, active state, maximum 8 W

COMMSCOPE®

Power Consumption, idle state, maximum 1 W

Protocol 3GPP/AISG 2.0

Dimensions

 Width
 498 mm | 19.606 in

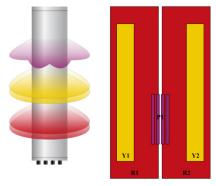
 Depth
 197 mm | 7.756 in

 Length
 1848 mm | 72.756 in

 Net Weight, antenna only
 37.9 kg | 83.555 lb

 TDD Column Spacing
 41 mm | 1.614 in

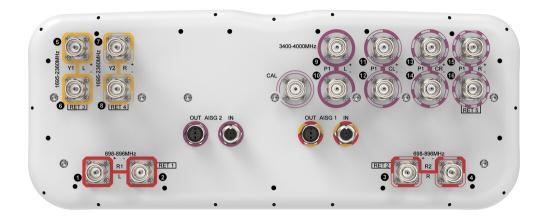
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	694-896	1 - 2	1	AISG1	CPxxxxxxxxxxxMM.1
R2	694-896	3 - 4	2	AISG1	CPxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	3	AISG1	CPxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	4	AISG1	CPxxxxxxxxxxxMM.4
P1	3400-4000	9 - 16	5	AISG2	CPxxxxxxxxxxxxMM.1

(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

	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	P1	P1
Frequency Band, MHz	698-806	806-896	1695-188	0 1850-199	0 1920-218	0 2300-236	0 3400–380	0 3700-4000
RF Port	1-4	1-4	5-8	5-8	5-8	5-8	9-16	9-16
Gain, dBi	14.6	15.1	17.6	17.8	18.3	18.5	16.2	16.4
Beamwidth, Horizontal, degrees	72	64	58	58	59	59	83	73
Beamwidth, Vertical, degrees	12.2	10.6	6.3	5.8	5.5	5.1	6.1	5.7
Beam Tilt, degrees	2-14	2-14	2-12	2-12	2-12	2-12	0-10	0-10
USLS (First Lobe), dB	19	16	17	17	18	17	15	14
Front-to-Back Ratio at 180°, dB	28	28	34	35	35	33	23	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							0.6	0.6
Coupler, max Phase Δ , Antenna port to Cal port, degrees							5	5
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
Isolation, Co-polarization, dB							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	-150	-150	-150	-150	-150	-150	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	0 1920-2180	0 2300-2360	3400-3800	3700-4000
Gain by all Beam Tilts,	14.3	14.8	17.1	17.6	18	18.2	15.5	15.8

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average, dBi								
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.7	±0.4	±0.5	±0.7	±0.9	±0.7
Beamwidth, Horizontal Tolerance, degrees	±6	±4	±5	±4	±3	±4	±25	±16
Beamwidth, Vertical Tolerance, degrees	±1	±0.8	±0.4	±0.2	±0.3	±0.3	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	18	15	13	14	14	14	13	12
CPR at Boresight, dB	26	26	19	21	21	21	15	14
CPR at Sector, dB	15	10	10	7	7	7	6	5
Electrical Specificati	ons, Br	oadcas	t 65°					
Frequency Band, MHz							3400-3	800 3700-4000
Gain, dBi							18	18.3
Beamwidth, Horizontal, degrees							65	65
Beamwidth, Vertical, degrees							6.1	5.8
Front-to-Back Total Power at 180° ± 30°, dB							27	28
USLS (First Lobe), dB							17	18
Electrical Specificati	ons, Er	rvelope	Pattern	1				
Frequency Band, MHz	Frequency Band, MHz							800 3700-4000
Gain, dBi							21.1	21.5
Beamwidth, Horizontal at 10 dB, degrees							118	117
Front-to-Back Total Power at 180° ± 30°, dB							29	29
USLS (First Lobe), dB							20	22
Electrical Specificati	ons, Se	rvice B	eam					
Frequency Band, MHz							3400-3	800 3700-4000
Steered 0° Gain, dBi							21.1	21.4
Steered 0° Beamwidth, Horizontal, degrees							24	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB							30	29
Steered 0° Horizontal 14 13 Sidelobe, dB							13	

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Steered 30° Gain, dBi	19.9	20.5
Steered 30° Beamwidth, Horizontal, degrees	29	25
Steered 30° Front-to-Back Total Power at 180° ± 30°. dB	28	28

Electrical Specifications, Soft Split

Frequency Band, MHz		3400-3800 3700-4000		
Gain, dBi	19.8	20.2		
Beamwidth, Horizontal, degrees	32	28		
Front-to-Back Total Power at 180° ± 30°, dB	28	28		
Horizontal Sidelobe, dB	18	17		

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.59 m ² 6.351 ft ²
Effective Projective Area (EPA), lateral	0.18 m ² 1.938 ft ²
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	597.0 N @ 150 km/h (134.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	433.0 N @ 150 km/h (97.3 lbf @ 150 km/h)
Wind Speed. maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2035 mm 80.118 in
Weight, gross	49.1 kg 108.247 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-2F – Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

