

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

- Multi-band FDD antenna featuring C-Band 8T8R functionality
- The C-band RET is factory set to AISG2. All other RET are assigned to AISG1
- Feature the same dimensions as existing 8 and 12-port FDD capable antennas
- New endcap designs provide improved wind loading performance
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

#### 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 Type**RF 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 8

RF Connector Quantity, mid band 4

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

Input Voltage 10-30 Vdc

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

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Power Consumption, active state, maximum 8 W

Power Consumption, idle state, maximum 1 W

Protocol 3GPP/AISG 2.0

#### **Dimensions**

**Width** 498 mm | 19.606 in

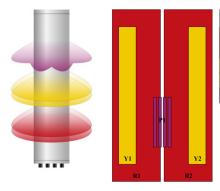
**Depth** 197 mm | 7.756 in

**Length** 1499 mm | 59.016 in

Net Weight, antenna only 33 kg | 72.752 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	CPxxxxxxxxxxxXMM.1
R2	694-896	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	3	AISG1	CPxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	4	AISG1	CPxxxxxxxxxxxxMM.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** 1,400 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	1695-1880	0 1850-1990	0 1920-2180	2300-2360	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	13.6	14	16.9	17.4	17.9	18.3	16.4	16.6
Beamwidth, Horizontal, degrees	59	53	60	60	62	62	83	70
Beamwidth, Vertical, degrees	17.1	15.1	6.3	5.8	5.5	5	6.1	5.8
Beam Tilt, degrees	2-16	2-16	2-12	2-12	2-12	2-12	0-10	0-10
USLS (First Lobe), dB	19	14	18	19	19	19	15	14
Front-to-Back Ratio at 180°, dB	29	29	31	34	34	31	29	30
Coupling level, Amp, Antenna port to Cal port, dB							-26	-26
Coupling level, max Amp $\Delta$ , Antenna port to Cal port, dB							±2	±2
Coupler, max Amp $\Delta$ , Antenna port to Cal port, dB							0.6	0.6
Coupler, max Phase $\Delta$ , 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	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	250	75	75

Electrical Specifications, BASTA

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Frequency Band, MHz	698-806	806-896	1695-188	0 1850-19	90 1920–2 <sup>.</sup>	180 2300-23	360 3400-38	00 3700-4000
Gain by all Beam Tilts, average, dBi	13.3	13.6	16.3	17.1	17.5	18	15.7	16.1
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.9	±0.4	±0.5	±0.8	±0.8	±0.7
Beamwidth, Horizontal Tolerance, degrees	±7.5	±7.7	±5.3	±4.5	±4.6	±7.1	±23.5	±15.8
Beamwidth, Vertical Tolerance, degrees	±1.2	±1.2	±0.4	±0.3	±0.3	±0.2	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB			14	15	15	17	14	13
Front-to-Back Total Power at 180° ± 30°, dB	23	22	23	26	27	27	23	23
CPR at Boresight, dB	22	21	19	20	19	20	15	14
CPR at Sector, dB	14	9	9	7	7	10	6	6
Electrical Specificati	ons, Bro	padcast	65°					
Frequency Band, MHz							3400-38	00 3700-4000
Gain, dBi							18.3	18.9
Beamwidth, Horizontal, degrees							65	65
Beamwidth, Vertical, degrees							6.2	5.9
Front-to-Back Total Power at 180° ± 30°, dB							26	26
USLS (First Lobe), dB							17	17
Electrical Specificati	ons, En	velope F	Pattern					
Frequency Band, MHz							3400-38	00 3700-4000
Gain, dBi							21.1	21.6
Electrical Specificati	ons, Ser	vice Be	am					
Frequency Band, MHz							3400-38	00 3700-4000
Steered 0° Gain, dBi							21.3	21.6
Steered 0° Beamwidth, Horizontal, degrees							24	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB							29	29
Steered 0° Horizontal Sidelobe, dB							14	14
Steered 30° Gain, dBi							19.7	20.1

Page 4 of 6



Steered 30° Beamwidth, Horizontal, degrees	29	26
Steered 30° Front-to-Back Total Power at 180° + 30° dB	28	27

### Electrical Specifications, Soft Split

Frequency Band, MHz	3400-3800 3700-4000		
Gain, dBi	19.6	19.9	
Beamwidth, Horizontal, degrees	33	30	
Front-to-Back Total Power at 180° ± 30°, dB	28	27	
Horizontal Sidelobe, dB	17	16	

#### Mechanical Specifications

Effective Projective Area (EPA), frontal	0.47 m <sup>2</sup>   5.059 ft <sup>2</sup>
Effective Projective Area (EPA), lateral	0.14 m²   1.507 ft²
Wind Loading @ Velocity, frontal	498.0 N @ 150 km/h (112.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	148.0 N @ 150 km/h (33.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	597.0 N @ 150 km/h (134.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	342.0 N @ 150 km/h (76.9 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	1686 mm   66.378 in
Weight, gross	43.3 kg   95.46 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

