

18-port sector antenna, 2x 698–960, 8x 1695-2690 and 8x 3300–3800 MHz, 65° HPBW, 6x RET

- Beam-forming weighting table available upon request
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Provide a future-ready antenna solution with flexibility to reassign antenna, support 2T2R at 698-960MHz, 4T4R at 1695-2690MHz, and 8T8R at 3300-3800MHz
- Combination of FDD MIMO antenna and 3.5GHz 8T8R TDD beam forming antenna, all in one for 5G ready
- Retractable tilt indicator rods

### General Specifications

Antenna Type Sector

**Band** Multiband

Calibration Connector Interface M-LOC

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

Radiator Material Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 4.3-10 Female | M-LOC

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, low band

2

RF Connector Quantity, total

18

### 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

**COMMSCOPE®** 

Internal RET High band (5) | Low band (1)

Power Consumption, idle state, maximum 1 W

Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

**Width** 395 mm | 15.551 in

**Depth** 228 mm | 8.976 in

**Length** 1600 mm | 62.992 in

Net Weight, without mounting kit 28.6 kg | 63.052 lb

**TDD Column Spacing** 42 mm | 1.654 in

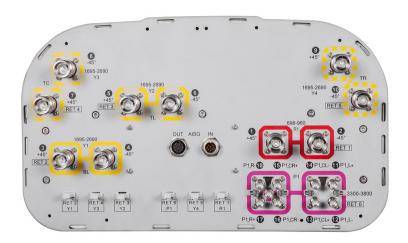
### Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-960	1 - 2	1	CPxxxxxxxxxxxxxxR1
Y1	1695-2690	3 - 4	2	CPxxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxY2
Y3	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxY3
Y4	1695-2690	9 - 10	5	CPxxxxxxxxxxxxxY4
P1	3300-3800	11 - 18	6	CPxxxxxxxxxxxxxxP1

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

## Port Configuration



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2690 MHz | 3300 – 3800 MHz | 698 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 900 W @ 50 °C

## **Electrical Specifications**

·	R1	R1	Y1-Y4	Y1-Y4	Y1-Y4	P1	P1
Frequency Band, MHz	698-890	890-960	1695-1920	1920-2200	2300-2690	3300-3600	3600-3800
Gain, dBi	14.9	14.9	15.4	16.1	16.2	15	15.1
Beamwidth, Horizontal, degrees	67	69	67	64	65	93	87
Beamwidth, Vertical, degrees	13.1	11.4	11.1	10.1	8.6	7.2	6.7
Beam Tilt, degrees	2-16	2-16	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	21	18	15	17	19	14	14
Front-to-Back Ratio at 180°, dB	36	32	31	31	30	33	33
Coupling level, Amp, Antenna port to Cal port, dB						26	26
Coupling level, max Amp $\Delta$ ,						±2	±2

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Antenna port to Cal port, dB							
Coupler, max Amp $\Delta$ , Antenna port to Cal port, dB						0.9	0.9
Coupler, max Phase $\Delta$ , Antenna port to Cal port, degrees						7	7
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	28	28	25	25	25	25	25
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-140	-140
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	75	75
Electrical Specificati	ons, BAS	STA					
Frequency Band, MHz	698-890	890-960	1695-1920	1920-2200	2300-2690	3300-3600	3600-3800
Gain by all Beam Tilts, average, dBi	14.6	14.6	14.9	15.7	15.7	14.5	14.7
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±1	±0.7	±0.8	±0.7	±0.5
Gain by Beam Tilt, average, dBi	2° 14.7 9° 14.8 16° 14.3	2° 14.7 9° 14.8 16° 14.3	2° 14.9 7° 14.9 12° 14.8	2° 15.8 7° 15.7 12° 15.5	2° 16.0 7° 15.8 12° 15.4	2° 14.4 7° 14.6 12° 14.5	2° 14.4 7° 14.9 12° 14.8
Beamwidth, Horizontal Tolerance, degrees	±2	±4.1	±5.9	±7.3	±9.4	±19.8	±14.4
Beamwidth, Vertical Tolerance, degrees	±1.3	±0.7	±0.7	±0.7	±0.6	±0.5	±0.4
USLS, beampeak to 20° above beampeak, dB	20	19	15	17	16	13	14
Front-to-Back Total Power at 180° ± 30°, dB	25	24	23	24	25	26	25
CPR at Boresight, dB	26	20	19	22	21	15	15
CPR at Sector, dB	10	8	8	7	7	8	7
Electrical Specificati	ons, Bro	adcast 6	5°				
Frequency Band, MHz						3300-3600	3600-3800
Gain, dBi						16	16.1
Beamwidth, Horizontal, degrees						60	61
Beamwidth, Horizontal Tolerance, degrees						±4.7	±3.3

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## Electrical Specifications, Service Beam

Frequency Band, MHz	3300-3600	3600-3800
Steered 0° Gain, dBi	19.2	19.4
Steered 0° Gain Tolerance, dBi	±0.4	±0.5
Steered 0° Beamwidth, Horizontal, degrees	27	26
Steered 13° USLS (First Lobe), dB	4	5
Steered 30° Gain, dBi	18.8	18.9
Steered 30° Gain Tolerance, dBi	±0.4	±0.6
Steered 30° Beamwidth, Horizontal, degrees	28	27
Steered 42° Front-to-Back Total Power at 180° ± 30°, dB	4	6

## Electrical Specifications, Soft Split

Frequency Band, MHz	3300-3600	3600-3800
Gain, dBi	18.7	19.2
Beamwidth, Horizontal, degrees	32	28
CPR at Beampeak, dB	18	15
Horizontal Sidelobe, dB	15	15

0.29 m<sup>2</sup> | 3.122 ft<sup>2</sup>

## Mechanical Specifications

Effective Projective Area (EPA), frontal

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Effective Projective Area (EPA), lateral	0.21 m <sup>2</sup>   2.26 ft <sup>2</sup>
Mechanical Tilt Range	0°-18°
Wind Loading @ Velocity, frontal	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	226.0 N @ 150 km/h (50.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	533.0 N @ 150 km/h (119.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

### Packaging and Weights

**Width, packed** 505 mm | 19.882 in

**COMMSCOPE®** 

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 1733 mm | 68.228 in

 Weight, gross
 39.4 kg | 86.862 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

