

10-port sector/multi beam antenna, 2x 698-960 sector and 8x 1710-2690 multi beam, 65° sector and 33° 4x multi beam, 5x RET with tilt indicators

- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Optimized radome design leading to market leading wind load performance
- Antenna with integrated pluggable RET and retractable tilt scale indicators

#### General Specifications

Antenna Type Multibeam

Band Multiband

**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 Copper | Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 7-16 DIN Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, low band

2

RF Connector Quantity, total

10

### 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

Internal RET High band (4) | Low band (1)

Power Consumption, active state, maximum 10 W Power Consumption, idle state, maximum 2 W

**Protocol** 3GPP/AISG 2.0 (Single RET)

**COMMSCOPE®** 

#### **Dimensions**

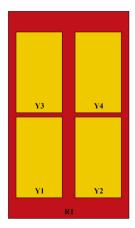
**Width** 350 mm | 13.78 in

**Depth** 208 mm | 8.189 in

**Length** 2100 mm | 82.677 in

Net Weight, without mounting kit 29.8 kg | 65.698 lb

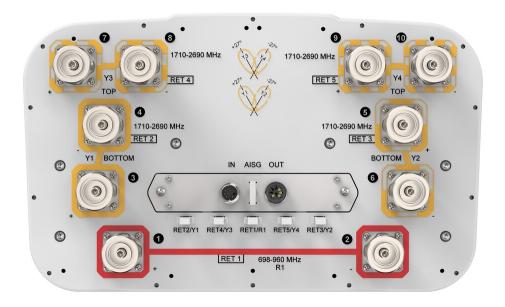
### Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-960	1 - 2	1	CPxxxxxxxxxxxxxR1
Y1	1710-2690	3 - 4	2	CPxxxxxxxxxxxxxY1
Y2	1710-2690	5 - 6	3	CPxxxxxxxxxxxxxY2
Y3	1710-2690	7 - 8	4	CPxxxxxxxxxxxxxY3
Y4	1710-2690	9 - 10	5	CPxxxxxxxxxxxxx4

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

## Port Configuration



## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1710 – 2690 MHz | 698 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,000 W @ 50 °C

## **Electrical Specifications**

Frequency Band, MHz	698-803	824-880	880-960	1710-1880	1920-2170	2300-2400	2490-2690
Gain, dBi	15	15	15.2	17	18.2	18.5	18.4
Beam Centers, Horizontal, degrees				±27	±27	±27	±27
Beamwidth, Horizontal, degrees	71	70	73	34	31	27	25
Beamwidth, Vertical, degrees	11	9.8	9.2	8.7	7.8	7	6.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	20	22	18	16	17	19	17
Front-to-Back Ratio at 180°, dB	38	32	28	35	34	34	32

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Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	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	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	200

### Electrical Specifications, BASTA

Frequency Band, MHz	698-803	824-880	880-960	1710-1880	1920-2170	2300-2400	2490-2690
Gain by all Beam Tilts, average, dBi	14.7	14.9	14.9	16.4	17.7	17.9	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.2	±0.5	±1	±0.8	±1.3	±1
Beamwidth, Horizontal Tolerance, degrees	±2.8	±1.7	±3.4	±2	±2	±1.6	±1
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.3	±0.4	±0.7	±0.6	±0.6	±0.8
USLS, beampeak to 20° above beampeak, dB	19	18	16	14	15	14	13
Front-to-Back Total Power at 180° ± 30°, dB	27	25	24	26	27	26	26
CPR at Boresight, dB	15	16	16	18	21	14	16
CPR at Sector, dB	11	12	11				

### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 300.0 N @ 150 km/h (67.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 752.0 N @ 150 km/h (169.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 376.0 N @ 150 km/h (84.5 lbf @ 150 km/h)

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

### Packaging and Weights

 Width, packed
 460 mm | 18.11 in

 Depth, packed
 350 mm | 13.78 in

 Length, packed
 2240 mm | 88.189 in

 Weight, gross
 43.8 kg | 96.562 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.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### 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.

#### \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

