

12-port sector antenna, 4x 694-960,4x 1427-2690 and 4x 1695- 2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

#### General Specifications

Antenna Type Sector

**Band** Multiband

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, mid band 8
RF Connector Quantity, low band 4
RF Connector Quantity, total 12

#### 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 Low band (2) | Mid band (4)

Power Consumption, active state, maximum 8 W
Power Consumption, idle state, maximum 1 W

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



#### **Dimensions**

**Width** 430 mm | 16.929 in

**Depth** 197 mm | 7.756 in

**Length** 2100 mm | 82.677 in

Net Weight, antenna only 32.4 kg | 71.43 lb

### Array Layout

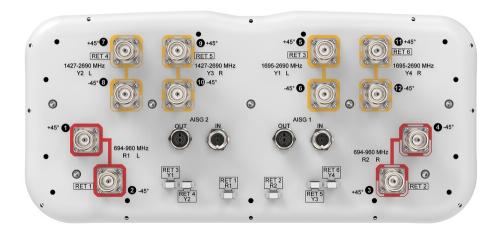


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxXY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxY4

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

### Port Configuration

Bottom





## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 900 W @ 50 °C **BASTA Version, electrical** BASTA v12

### **Electrical Specifications**

	R1,R2	R1,R2	R1,R2	Y2/Y3	Y2/Y3	Y2/Y3	Y2/Y3	Y2/Y3
Frequency Band, MHz	698-806	790-894	890-960	1427-1518	8 1695–199	5 1920-2300	2300-250	0 2490-2690
RF Port	1-4	1-4	1-4	7-10	7-10	7-10	7-10	7-10
Beamwidth, Horizontal, degrees	66	57	54	72	66	61	61	57
Beamwidth, Vertical, degrees	10.4	9.4	8.5	6.8	5.7	5.2	4.6	4.4
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	17	16	17	16	17	19	17
Front-to-Back Ratio at 180°, dB	31	31	34	31	35	33	33	35
Front-to-Back Total Power at 180° ± 30°, dB	21	22	21	21	28	29	27	28
CPR at Boresight, dB	26	25	22	21	18	18	22	17
CPR at Sector, dB	10	9	6	7	7	5	3	2
Isolation, Cross Polarization, dB	27	27	27	26	26	26	26	26
Isolation, Inter-band, dB	27	27	27	26	26	26	26	26
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	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200

### Electrical Specifications, BASTA

Frequency Band, MHz	698-806	790-894	890-960	1427-1518	8 1695–199	5 1920-230	0 2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	14.3	15	15.2	15.4	16.5	17.3	17.5	17.7
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.4	±0.4	±0.9	±0.6	±0.3	±0.6
Beamwidth, Horizontal	±8	±8	±5	±10	±5	±7	±5	±4

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Tolerance, degrees								
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.8	±0.6	±0.3	±0.4	±0.4	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	17	15	14	15	16	17	17	15

## **Electrical Specifications**

	Y1/Y4	Y1/Y4	Y1/Y4	Y1/Y4
Frequency Band, MHz	1695-199	5 1920-230	0 2300-250	0 2490-2690
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Beamwidth, Horizontal, degrees	69	66	60	61
Beamwidth, Vertical, degrees	5.7	5.2	4.6	4.4
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	17	20	21
Front-to-Back Ratio at 180°, dB	34	29	34	36
Front-to-Back Total Power at 180° ± 30°, dB	26	26	25	26
CPR at Boresight, dB	21	20	20	19
CPR at Sector, dB	10	8	9	7
Isolation, Cross Polarization, dB	27	27	27	27
Isolation, Inter-band, dB	26	26	26	26
VSWR   Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	250	250	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	1695-199	5 1920-230	0 2300–250	0 2490-2690
Gain by all Beam Tilts, average, dBi	16.9	17.7	18.3	18.1
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.5	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±5	±6	±4	±6
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.4	±0.3	±0.2

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**USLS, beampeak to 20° above** 13 14 16 15

beampeak, dB

#### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 780.0 N @ 150 km/h (175.4 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
 530 mm | 20.866 in

 Depth, packed
 349 mm | 13.74 in

 Length, packed
 2272 mm | 89.449 in

 Weight, gross
 44.6 kg | 98.326 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

