

# 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

<b>RET Interface</b> 8-pin DIN Female8-pin DIN Male
<b>RET Interface, quantity</b> 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)

Page 1 of 5



#### 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

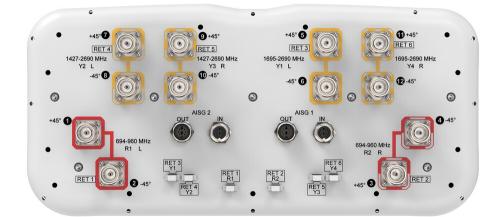
		100				a		23 (A	
1					Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
					R1	694-960	1-2	1	CPxxxxxxxxxxxxR1
					R2	694-960	3-4	2	CPxxxxxxxxxxxxR2
					Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxXXXXXXY1
					Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxXXXXXXY2
	¥2	Y3	¥4		Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxXXXXXXXXXY3
F	12 R1	R			¥4	1695-2690	11-12	6	CPxxxxxxxxxxxxXXXXY4
eft	t	Ri	Right (Sizes of colored boxes are not						

Left Bottom

Y1

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

# Port Configuration



Page 2 of 5



### **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 1920-230	0 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	1427-151	8 1695-199	5 1920-230	0 2300-250	0 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

Page 3 of 5



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 1920-2300	2300-2500	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

Page 4 of 5



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/Exempted

#### Included Products

9001:2015

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

Page 5 of 5

