

16-port sector/multibeam antenna 4x 694–960 MHz , 4x 1695-2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 8x RET. Band cascaded SRET

### General Specifications

Antenna Type Multibeam

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 | Wind loading figures are validated by wind tunnel

measurements described in EN1991-1-4 standard

**Radome Material** Fiberglass, UV resistant

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location

RF Connector Quantity, high band

12

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 (6) | Low band (2)

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

**Width** 498 mm | 19.606 in

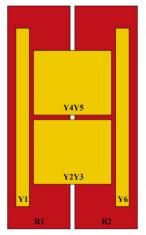
**COMMSCOPE®** 

**Depth** 197 mm | 7.756 in

**Length** 2577 mm | 101.457 in

Net Weight, antenna only 53 kg | 116.845 lb

### Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxXR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxx4
Y5	1710-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	65°	8	AISG1	CPxxxxxxxxxxxxXY6

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

## Port Configuration



### **Electrical Specifications**



**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2690 MHz | 1710 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,700 W @ 50 °C

### **Electrical Specifications**

Frequency Band, MHz	694-80	6790-89	6890-96	601695-199	001920-230	002300-250	002490-269	901710-199	901920-230	002300-250	002490-2690
Beam Centers, Horizontal, degrees								±27	±27	±27	±27
Beamwidth, Horizontal, degrees	71	64	63	73	64	58	56	36	33	30	27
Beamwidth, Vertical, degrees	9.2	8.2	7.6	5.8	5.3	4.8	4.6	7.2	6.5	5.7	5.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	17	18	25	24	21	18	17	19	20	20
Front-to- Back Ratio at 180°, dB	29	28	29	34	33	35	33	38	38	34	32
Front-to- Back Total Power at 180° ± 30°, dB	22	22	22	24	25	28	26	32	31	28	27
CPR at Boresight, dB	24	22	17	21	21	23	22	17	21	17	21
CPR at Sector, dB	10	10	13	8	7	9	7				
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25	25	25	25

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Isolation, Beam to Beam, dB								17	17	17	17
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	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	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	200	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694-80	06790-89	96890-96	501695 <b>–</b> 199	901920-230	002300-250	002490-269	901710-199	901920-230	002300-250	002490-2690
Gain by all Beam Tilts, average, dBi	15.2	15.6	15.8	16.6	17.7	18.3	18.5	17.3	18.6	18.7	19
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.3	±0.8	±0.7	±0.3	±0.3	±1.4	±0.9	±1.2	±0.6
Beamwidth, Horizontal Tolerance, degrees	±9.8	±7.1	±5.4	±7.2	±6.5	±3.6	±2.7	±3.3	±2	±3.7	±1
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.6	±0.4	±0.4	±0.4	±0.2	±0.2	±0.6	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	18	16	15	18	18	16	15	16	16	14	14
CPR at 10 dB Horizontal Beamwidth, dB								9	13	12	18

Mechanical Specifications

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 Wind Loading @ Velocity, frontal
 876.0 N @ 150 km/h (196.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 229.0 N @ 150 km/h (51.5 lbf @ 150 km/h)

**Wind Loading @ Velocity, maximum** 1,165.0 N @ 150 km/h (261.9 lbf @ 150 km/h)

**Wind Loading @ Velocity, rear** 603.0 N @ 150 km/h (135.6 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
 2824 mm | 111.181 in

 Weight, gross
 74 kg | 163.142 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-4 – 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.

BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.

### \* Footnotes

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

