

# 20-port Sector/Multi beam antenna, 4x 698–960 MHz 65° HPBW and 16x 1710-2690MHz 8x33° HPBW, 10x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- New aerodynamic endcaps for wind load optimization

# General Specifications

Antenna Type Sector

Band Multiband

**Grounding Type**RF connector inner conductor and body grounded to reflector and mounting

bracket

Performance NoteOutdoor usageRF Connector Interface4.3-10 Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, low band

4

RF Connector Quantity, total

20

### 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 (8) | Low band (2)

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

**Protocol** 3GPP/AISG 2.0

### **Dimensions**

 Width
 640 mm | 25.197 in

 Depth
 235 mm | 9.252 in

 Length
 2688 mm | 105.827 in

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### Net Weight, antenna only

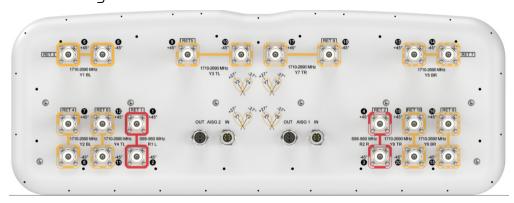
78 kg | 171.96 lb

# Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID		
R1	698-960	1-2	1	AISG1			
R2	698-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
Y1	1710-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1		
Y2	1710-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxx		
Y3	1710-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxXY3		
Y4	1710-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxx44		
Y5	1710-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxY5		
Y6	1710-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxx46		
Y7	1710-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxx		
Y8	1710-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxxxXY8		

# Port Configuration



# **Electrical Specifications**

**Impedance** 50 ohm

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

Polarization ±45°

**Total Input Power, maximum** 2,250 W @ 50 °C

# **Electrical Specifications**

R1,R2 R1,R2 R1,R2 Y1-Y8 Y1-Y8 Y1-Y8 Y1-Y8

Frequency Band, MHz 698-790 790-890 890-960 1710-1880 1850-1990 1920-2180 2300-2500 2500-2690

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RF Port	1-4	1-4	1-4	5-20	5-20	5-20	5-20	5-20
Gain at Mid Tilt, dBi	16.2	16.4	16.4	17.4	18.3	19	20	20.1
Beam Centers, Horizontal, degrees				±27	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	63	62	69	36	34	33	26	25
Beamwidth, Vertical, degrees	9	8.2	7.5	7.2	6.8	6.4	5.6	5.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	21	19	17	18	17	18	19
Front-to-Back Ratio at 180°, dB	34	33	29	34	35	35	34	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	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	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	150	150

# Electrical Specifications, BASTA

Frequency Band, MHz	698-790	790-890	890-960	1710-188	80 1850-199	0 1920-218	0 2300-250	00 2500-2690
Gain by all Beam Tilts, average, dBi	16.1	16.3	16.3	17.2	18	18.8	19.7	19.7
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.5	±1.4	±0.6	±0.9	±0.6	±0.6
Beamwidth, Horizontal Tolerance, degrees	±5	±5	±6	±2	±2	±2	±2	±2
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.6	±0.4	±0.4	±0.3	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	17	17	17	14	16	16	15	16
Front-to-Back Total Power at 180° ± 30°, dB	25	25	24	28	29	29	28	27
CPR at Boresight, dB	14	15	15	19	20	21	20	16
CPR at Sector, dB	10	10	13					
CPR at 10 dB Horizontal Beamwidth, dB				10	12	13	12	10

Mechanical Specifications

Wind Loading @ Velocity, frontal

1,103.0 N @ 150 km/h (248.0 lbf @ 150 km/h)

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**Wind Loading @ Velocity, lateral** 329.0 N @ 150 km/h (74.0 lbf @ 150 km/h)

 $\textbf{Wind Loading @ Velocity, maximum} \hspace{1cm} 1,405.0 \text{ N} \textcircled{a} 150 \text{ km/h} \hspace{0.5cm} (315.9 \text{ lbf} \textcircled{a} 150 \text{ km/h})$ 

**Wind Loading @ Velocity, rear** 689.0 N @ 150 km/h (154.9 lbf @ 150 km/h)

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

### Packaging and Weights

 Width, packed
 760 mm | 29.921 in

 Depth, packed
 390 mm | 15.354 in

 Length, packed
 2910 mm | 114.567 in

 Weight, gross
 103 kg | 227.076 lb

# Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

### 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



# 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.

### Product Classification

**Product Type** Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.5 kg | 14.33 lb

Material Specifications

Material Type Galvanized steel

# Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

# 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





# 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.

Product Classification

**Product Type** Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net4.6 kg | 10.141 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

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



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