

8-port sector antenna, 2x 694-960 and 6x 1695-2690 MHz, 65° HPBW, 4x RET with tilt indicators

- 4 Independent Arrays (1 Low band and 3 high bands) in a single radome housing
- Optimized radome design leading to market leading wind load performance
- Antenna with retractable tilt scale indicators and integrated pluggable RET
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Radiator Material Aluminum | Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 6
RF Connector Quantity, low band 2

RF Connector Quantity, total 8

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface 2x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out:

Female Pin3: RS485A(AISG_B), Pin5: RS485B(AISG_A), Pin6: DC 10~30V, Pin7:

DC_ Return

RET Interface, quantity 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET High band (3) | Low band (1)

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

Page 1 of 5



Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

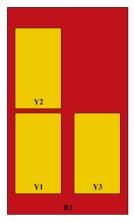
 Width
 301 mm | 11.85 in

 Depth
 181 mm | 7.126 in

 Length
 2688 mm | 105.827 in

Net Weight, without mounting kit 22.3 kg | 49.163 lb

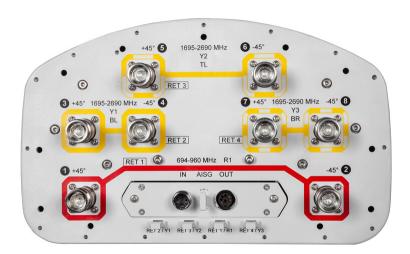
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxXR1
Y1	1695-2690	3 - 4	2	AISG1	CPxxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY2
Y3	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY3

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

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

Polarization ±45°

Total Input Power, maximum 900 W

Electrical Specifications

Frequency Band, MHz	694-790	790-890	890-960	1695-1920	1920-2200	2300-2500	2500-2690
Gain, dBi	16.5	16.7	16.7	17.7	17.9	17.5	17.7
Beamwidth, Horizontal, degrees	70	67	64	65	66	66	63
Beamwidth, Vertical, degrees	8.3	7.5	7	7.2	6.6	5.8	5.4
Beam Tilt, degrees	0-10	0-10	0-10	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	18	18	17	19	20	18
Front-to-Back Ratio at 180°, dB	30	33	33	36	35	31	33
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	30	31	29	31	30	28	28
Isolation, Cross Polarization, dB	27	27	27	27	27	27	27

Page 3 of 5



Isolation, Inter-band, dB	27	27	27	27	27	27	27
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, maximum, watts	500	500	500	300	300	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1695-1920	1920-2200	2300-2500	2500-2690
Gain by all Beam Tilts, average, dBi	16.2	16.5	16.4	17.2	17.6	17.1	17.5
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.5	±0.8	±0.5	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0° 16.1 5° 16.3 10° 16.1	0° 16.6 5° 16.6 10° 16.1	0° 16.4 5° 16.6 10° 16.3	2° 17.3 7° 17.3 12° 16.8	2° 17.7 7° 17.7 12° 17.3	2° 17.1 7° 17.3 12° 16.7	2° 17.5 7° 17.7 12° 16.9
Beamwidth, Horizontal Tolerance, degrees	±1.3	±1.7	±2.1	±5	±4	±7.8	±10.7
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.3	±0.3	±0.4	±0.4	±0.2	±0.2
Front-to-Back Total Power at 180° ± 30°, dB	22	25	25	28	28	26	26
CPR at Boresight, dB	20	25	23	19	20	22	22

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 441.0 N @ 150 km/h (99.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 374.0 N @ 150 km/h (84.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 746.0 N @ 150 km/h (167.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 448.0 N @ 150 km/h (100.7 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 411 mm | 16.181 in

 Depth, packed
 324 mm | 12.756 in

 Length, packed
 2814 mm | 110.787 in

 Weight, gross
 34.9 kg | 76.941 lb

Regulatory Compliance/Certifications

Agency Classification

COMMSCOPE®

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

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

