

20-port sector antenna, 4x 694–960 , 4x 1427–2690, 4x 1695-2180, 4x 2490-2690 and 4x 1695-2690MHz, 65° HPBW, 10x RET

- SEED® antenna providing high gain and improved efficiency
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Innovative aerodynamic shape optimized for reduced wind loading in every direction

General Specifications

Antenna Type Sector

Band Multiband

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

bracket

Performance NoteOutdoor usageRF Connector Interface4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 0
RF Connector Quantity, mid band 16
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 Low band (2) | Mid band (8)

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

Protocol 3GPP/AISG 2.0

Dimensions

Width 498 mm | 19.606 in



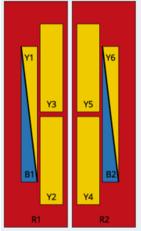
Page 1 of 5

Depth 197 mm | 7.756 in

Length 2258 mm | 88.898 in

Net Weight, antenna only 41.4 kg | 91.271 lb

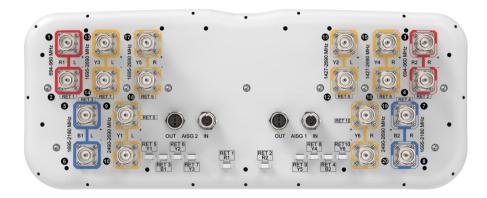
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
B2	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxxxXY1
Y2	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxxxXY2
Y3	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxXY3
Y4	1427-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxx4
Y5	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxxY5
Y6	2490-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxY6

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1427 – 2690 MHz | 1695 – 2180 MHz | 1695 – 2690 MHz | 2490 – 2690

MHz | 694 - 960 MHz

Polarization ±45°

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Total Input Power, maximum

900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	B1,B2	B1,B2	Y1,Y6	Y2,Y4
Frequency Band, MHz	698-806	790-894	890-960	1695-1995	1920-2180	2490-2690	1427-1518
RF Port	1-4	1-4	1-4	5-8	5-8	9,10,19,20	11,12,15,16
Gain at Mid Tilt, dBi	15.2	15.8	15.7	17.4	18.2	18.3	14.8
Beamwidth, Horizontal, degrees	72	64	66	69	65	57	72
Beamwidth, Vertical, degrees	9.8	8.6	7.8	5.6	5	4.2	10.4
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	17	17	17	17	17	15
Front-to-Back Ratio at 180°, dB	31	31	31	32	30	32	33
Front-to-Back Total Power at 180° ± 30°, dB	21	21	21	27	26	27	23
Isolation, Cross Polarization, dB	26	26	26	25	25	25	25
Isolation, Inter-band, dB	26	26	26	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	250

Electrical Specifications

	Y2,Y4	Y2,Y4	Y2,Y4	Y2,Y4
Frequency Band, MHz	1695-1995	1920-2300	2300-2500	2490-2690
RF Port	11,12,15,16	11,12,15,16	11,12,15,16	11,12,15,16
Gain at Mid Tilt, dBi	16.6	17.3	18	18.2
Beamwidth, Horizontal, degrees	65	61	56	54
Beamwidth, Vertical, degrees	8.3	7.4	6.4	6
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	18	18	18
Front-to-Back Ratio at 180°, dB	33	33	32	32
Front-to-Back Total Power at 180° ± 30°, dB	30	29	28	28

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Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
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

	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5
Frequency Band, MHz	1695-1995	1920-2300	2300-2500	2490-2690
RF Port	13,14,17,18	13,14,17,18	13,14,17,18	13,14,17,18
Gain at Mid Tilt, dBi	16.5	17.4	17.8	18
Beamwidth, Horizontal, degrees	65	58	56	57
Beamwidth, Vertical, degrees	8.6	7.6	6.6	6.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	16	19
Front-to-Back Ratio at 180°, dB	33	33	33	33
Front-to-Back Total Power at 180° ± 30°, dB	30	30	30	29
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
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

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 768.0 N @ 150 km/h (172.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 201.0 N @ 150 km/h (45.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 528.0 N @ 150 km/h (118.7 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
 2445 mm | 96.26 in

 Weight, gross
 52.6 kg | 115.963 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-2F — Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

