

12-port sector antenna, 4x 694-960,4x 1427-2690 and 4x 1695- 2690 MHz, 65° HPBW, 6x RET

- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Reduces the amount of aluminum used to minimize CO2 release
- GREEN and High Gain Antenna Solution
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area

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

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

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 (4)

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

Protocol 3GPP/AISG 2.0 (Single RET)

COMMSCOPE®

Dimensions

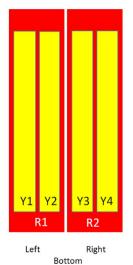
Width 430 mm | 16.929 in

Depth 197 mm | 7.756 in

Length 2769 mm | 109.016 in

Net Weight, antenna only 46 kg | 101.413 lb

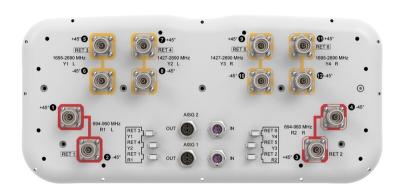
Array Layout



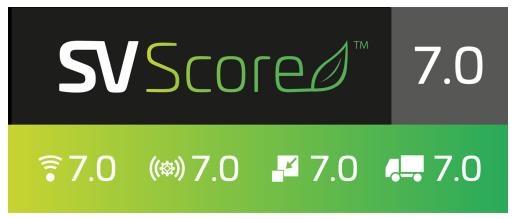
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxY4

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

Port Configuration



Logo Image



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

Total Input Power, maximum 1,200 W @ 50 °C

BASTA Version, electricalBASTA v11

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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	1427-151	8 1695–199	5 1920-230	0 2300-250	0 2490-2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10
Beamwidth, Horizontal, degrees	71	61	59	69	62	63	59	58
Beamwidth, Vertical, degrees	7.5	6.8	6.4	7.2	5.8	5.3	4.3	4
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	18	18	17	17	17	15	16
Front-to-Back Ratio at 180°, dB	30	31	30	30	30	31	32	34
Front-to-Back Total Power at 180° ± 30°, dB	20	21	20	22	23	26	26	26
Isolation, Cross Polarization, dB	27	27	27	25	25	25	25	25
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	15.5	16.3	16.6	15.7	17.6	18.2	19.2	19.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.6	±0.4	±0.5	±0.7	±0.5	±0.6	±0.4
Beamwidth, Horizontal Tolerance, degrees	±7	±8	±6	±7	±7	±6	±6	±5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.4	±0.3	±0.5	±0.5	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	14	14	15	15	16	15	14	13
CPR at Boresight, dB	19	20	16	17	21	18	22	22

Electrical Specifications

	Y1,Y4	Y1,Y4	Y1,Y4	Y1,Y4
Frequency Band, MHz	1695-1995	1920-2300	2300-2500	2490-2690
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12

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Beamwidth, Horizontal, degrees	66	64	63	63
Beamwidth, Vertical, degrees	6.1	5.4	4.7	4.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	19	19
Front-to-Back Ratio at 180°, dB	26	30	30	34
Front-to-Back Total Power at 180° ± 30°, dB	22	24	26	26
Isolation, Cross Polarization, dB	25	25	25	25
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	1695-1995	1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	17.3	18.3	18.8	18.8
Gain by all Beam Tilts Tolerance, dB	±1	±0.5	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±8	±4	±4	±5
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	16	15	15	16
CPR at Boresight, dB	21	21	21	18

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 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	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

 Width, packed
 529 mm | 20.827 in

 Depth, packed
 356 mm | 14.016 in

 Length, packed
 2897 mm | 114.055 in

 Weight, gross
 59.5 kg | 131.175 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

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

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

