

- 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

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, 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 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET Low band (2) | Mid band (4)

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

 Width
 430 mm | 16.929 in

 Depth
 197 mm | 7.756 in

COMMSCOPE®

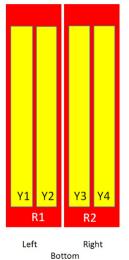
Length

2100 mm | 82.677 in

Net Weight, antenna only

36.6 kg | 80.689 lb

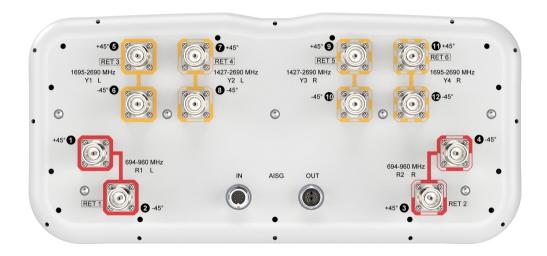
Array Layout



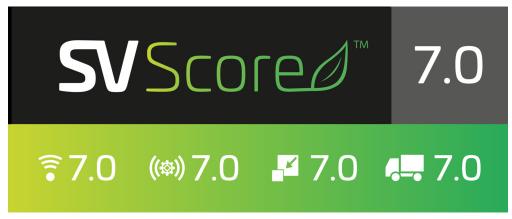
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxXY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxY4

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

Port Configuration



Logo Image



Electrical Specifications

Page 3 of 6

Impedance 50 ohm

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

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

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	1427-1518	8 1695–199	5 1920-230	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	64	60	57	75	65	63	61	58
Beamwidth, Vertical, degrees	10.4	9.3	8.5	7.2	5.8	5.2	4.3	4.1
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	16	17	18	15	17	14	16
Front-to-Back Ratio at 180°, dB	25	30	30	33	33	33	33	32
Front-to-Back Total Power at 180° ± 30°, dB	20	21	22	23	24	24	28	27
Isolation, Cross Polarization, dB	25	25	25	26	26	26	26	26
Isolation, Inter-band, dB	25	25	25	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	1427-1518	8 1695–199	5 1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	14.4	15.1	15.3	15.6	17.2	18.1	19.2	19.2
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.3	±0.5	±0.7	±0.8	±0.3	±0.3
Beamwidth, Horizontal Tolerance, degrees	±10	±6	±5	±7	±9	±4	±3	±4
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.4	±0.4	±0.5	±0.6	±0.2	±0.1
USLS, beampeak to 20° above beampeak, dB	15	15	13	14	14	15	14	13

Page 4 of 6



CPR at Boresight, dB 18 19 18 19 18 19 21

Electrical Specifications

	Y1,Y4	Y1,Y4	Y1,Y4	Y1,Y4
Frequency Band, MHz	1695-199	5 1920-230	0 2300-250	0 2490-2690
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Beamwidth, Horizontal, degrees	67	63	64	62
Beamwidth, Vertical, degrees	6.1	5.3	4.6	4.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	20	20	17	18
Front-to-Back Ratio at 180°, dB	33	28	31	32
Front-to-Back Total Power at 180° ± 30°, dB	26	26	27	27
Isolation, Cross Polarization, dB	27	27	27	27
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	17.2	18.1	18.5	18.8
Gain by all Beam Tilts Tolerance, dB	±0.9	±0.5	±0.3	±0.3
Beamwidth, Horizontal Tolerance, degrees	±6	±6	±5	±6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.4	±0.1
USLS, beampeak to 20° above beampeak, dB	15	15	16	16
CPR at Boresight, dB	21	22	21	19

Mechanical Specifications

BASTA Version, mechanicalBASTA v12

COMMSCOPE®

 Wind Loading @ Velocity, frontal
 494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)

Wind Loading @ Velocity, maximum 780.0 N @ 150 km/h (175.4 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 530 mm | 20.866 in

 Depth, packed
 349 mm | 13.74 in

 Length, packed
 2272 mm | 89.449 in

 Weight, gross
 46.6 kg | 102.735 lb

Regulatory Compliance/Certifications

Agency Classification

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

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

