

12-port sector antenna, 2x 694-960 (R1), 2x 1695-2690 (Y2), 4x 1695-2180 (B1-B2), 4x 2490-2690 (Y1&Y3) MHz, 65° HPBW, 5x RET. Y2 & Y3 share a common RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type Sector

Band Multiband

Grounding TypeRF connector inner conductor and body grounded to reflector and

mounting bracket

Performance Note Outdoor usage

Radome MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, low band

2

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 High band (4) | Low band (1)

Power Consumption, idle state, maximum 1 W
Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)

COMMSCOPE®

Dimensions

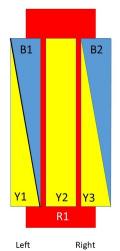
Width 395 mm | 15.551 in

Depth 228 mm | 8.976 in

Length 1500 mm | 59.055 in

Net Weight, without mounting kit 24 kg | 52.911 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
B1	1695-2180	3-4	2	CPxxxxxxxxxxxxxB1
B2	1695-2180	5-6	3	CPxxxxxxxxxxxxxB2
Y1	2490-2690	7-8	_	
Y3	2490-2690	11-12	4	CPxxxxxxxxxxxxXY1
Y2	1695-2690	9-10	5	CPxxxxxxxxxxxxxY1

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

Port Configuration

Bottom



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2180 MHz | 1695 – 2690 MHz | 2490 – 2690 MHz | 694 –

960 MHz

Polarization ±45°

Total Input Power, maximum $800~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$

Electrical Specifications

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	R1	R1	B1-B2	B1-B2	Y2	Y2	Y2	Y1&Y3
Frequency Band, MHz	694-803	824-960	1695-188	0 1920-218	0 1695–188	0 1920–218	0 2490-269	0 2490-2690
Gain, dBi	14	14.6	16.7	17.3	16.6	17.9	17.4	17.3
Beamwidth, Horizontal, degrees	66	64	71	66	68	59	61	64
Beamwidth, Vertical, degrees	16.6	14.3	6.9	6.3	7.4	6.7	5.4	4.9
Beam Tilt, degrees	2-17	2-17	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	17	18	17	16	16	17	16
Front-to-Back Ratio at 180°, dB	40	34	32	34	33	36	29	30
Isolation, Cross Polarization, dB	28	28	28	28	25	25	25	28



Isolation, Inter-band, dB	28	28	28	28	28	28	28	28
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	300	300	250	250	250	250	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	694-803	824-960	1695-188	0 1920-218	0 1695–188	0 1920–218	0 2490-269	0 2490-2690
Gain by all Beam Tilts, average, dBi	13.7	14.2	16.3	16.8	15.8	17.3	17	16.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.6	±0.6	±1.2	±0.7	±0.6	±0.7
Gain by Beam Tilt, average, dBi	2° 13.8 10° 13.9 17° 13.6	2° 14.3 10° 14.4 17° 13.9	2° 16.2 7° 16.6 12° 16.3	2° 16.6 7° 17.1 12° 16.7	2° 15.8 7° 16.0 12° 15.7	2 ° 17.2 7 ° 17.5 12 ° 17.2	2° 16.9 7° 17.2 12° 16.8	2° 16.6 7° 17.2 12° 16.7
Beamwidth, Horizontal Tolerance, degrees	±3.4	±2.4	±2.9	±5.6	±7.9	±8.8	±5.2	±7.3
Beamwidth, Vertical Tolerance, degrees	±1.3	±1.1	±0.4	±0.4	±0.5	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	13	16	14	16	13	14	14	14
Front-to-Back Total Power at 180° ± 30°, dB	28	25	23	25	28	29	24	23
CPR at Boresight, dB	16	16	21	22	19	23	21	21
CPR at Sector, dB	10	9	6	5	5	10	5	9

Mechanical Specifications

Effective Projective Area (EPA), frontal $0.27 \, \text{m}^2 \mid 2.906 \, \text{ft}^2$ Effective Projective Area (EPA), lateral $0.2 \, \text{m}^2 \mid 2.153 \, \text{ft}^2$

Mechanical Tilt Range 0°-18°

 Wind Loading @ Velocity, frontal
 289.0 N @ 150 km/h (65.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 209.0 N @ 150 km/h (47.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 495.0 N @ 150 km/h (111.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 297.0 N @ 150 km/h (66.8 lbf @ 150 km/h)

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

Packaging and Weights

Width, packed 505 mm | 19.882 in

COMMSC PE°

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 1643 mm | 64.685 in

Weight, gross 39 kg | 85.98 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-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

