

6-port sector antenna, 2x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET, 600 MHz-Ready Antenna Technology

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 | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 4
RF Connector Quantity, low band 2
RF Connector Quantity, total 6

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v1

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 1 female | 1 male

Input Voltage 10–30 Vdc

Internal RET High band (2) | Low band (1)

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

COMMSCOPE®

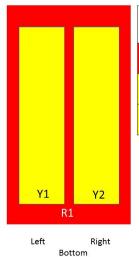
Width 301 mm | 11.85 in

Depth 181 mm | 7.126 in

Length 2451 mm | 96.496 in

Net Weight, without mounting kit 24.4 kg | 53.793 lb

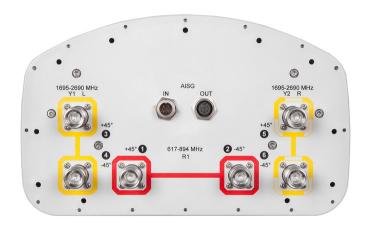
Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxXR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxY2

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 617 – 894 MHz

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

Electrical Specifications

'							
Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain, dBi	15.4	15.8	17.5	18.1	18.6	19.1	19.2
Beamwidth, Horizontal, degrees	71	69	66	66	65	61	57
Beamwidth, Vertical, degrees	10.3	8.7	5.6	5.3	4.9	4.4	4.1
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	23	20	16	17	17	18	20
Front-to-Back Ratio at 180°, dB	26	28	37	35	32	28	31
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	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

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PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C,	250	250	200	200	200	200	200
maximum, watts							

Electrical Specifications, BASTA

Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain by all Beam Tilts, average, dBi	15.2	15.5	17	17.6	18.1	18.7	18.8
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.7	±0.6	±0.6	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2° 14.9 7° 15.2 12° 15.2	2° 15.1 7° 15.6 12° 15.4	2° 16.9 7° 17.1 12° 16.9	2° 17.3 7° 17.7 12° 17.7	2° 17.7 7° 18.1 12° 18.1	2° 18.5 7° 18.8 12° 18.4	2° 18.5 7° 19.0 12° 18.7
Beamwidth, Horizontal Tolerance, degrees	±1.9	±2.9	±4.1	±3.7	±3.6	±7.4	±7.3
Beamwidth, Vertical Tolerance, degrees	±0.6	±1.1	±0.4	±0.2	±0.4	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	21	15	15	16	16	17	13
Front-to-Back Total Power at 180° ± 30°, dB	22	23	24	25	25	24	25
CPR at Boresight, dB	17	16	16	16	17	17	16
CPR at Sector, dB	10	11	7	7	7	6	4

Mechanical Specifications

Mechanical Tilt Range 0°-12°

 Wind Loading @ Velocity, frontal
 396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 332.0 N @ 150 km/h (74.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 761.0 N @ 150 km/h (171.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 401.0 N @ 150 km/h (90.1 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 380 mm | 14.961 in

 Depth, packed
 295 mm | 11.614 in

 Length, packed
 2571 mm | 101.221 in

 Weight, gross
 36.8 kg | 81.13 lb

Regulatory Compliance/Certifications

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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

