

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

General Specifications

RF Connector Interface

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding Type RF connector inner conductor and body grounded to reflector and

mounting bracket

4 3-10 Female

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Radiator Material Copper | Low loss circuit board

Reflector Material Aluminum

RF Connector Location Bottom

KF Connector Location Bollon

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 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 High band (2) | Low band (1)

Power Consumption, idle state, maximum 2 W
Power Consumption, normal conditions, maximum 10 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

COMMSCOPE®

Width 300 mm | 11.811 in

Depth 181 mm | 7.126 in

Length 1413 mm | 55.63 in

Net Weight, without mounting kit 15.7 kg | 34.613 lb

Array Layout

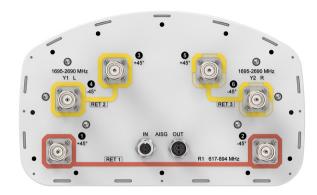


| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|---------------|-------------------|
| R1 | 617-894 | 1-2 | 1 | CPxxxxxxxxxxxxxR1 |
| Y1 | 1695-2690 | 3-4 | 2 | CPxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxY2 |

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

Port Configuration

Bottom



Electrical Specifications

Impedance 50 ohm

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

COMMSCOPE®

Polarization ±45°

Total Input Power, maximum $900~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$

Electrical Specifications

| Frequency Band, MHz | 617-698 | 698-894 | 1695-1880 | 1850-1990 | 1920-2200 | 2300-2500 | 2500-2690 |
|--|------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 13.2 | 14.1 | 16.5 | 17 | 17.3 | 17.8 | 17.8 |
| Beamwidth, Horizontal, degrees | 75 | 74 | 69 | 66 | 67 | 64 | 60 |
| Beamwidth, Vertical, degrees | 18.2 | 15.4 | 7.6 | 7.1 | 6.8 | 5.9 | 5.5 |
| Beam Tilt, degrees | 2-18 | 2-18 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 23 | 23 | 16 | 16 | 17 | 19 | 18 |
| Front-to-Back Ratio at 180°, dB | 28 | 32 | 32 | 32 | 31 | 31 | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at 50°C, maximum, watts | 250 | 250 | 200 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

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|---|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Frequency Band, MHz | 617-698 | 698-894 | 1695-1880 | 1850-1990 | 1920-2200 | 2300-2500 | 2500-2690 |
| Gain by all Beam Tilts, average, dBi | 13 | 13.4 | 16.1 | 16.6 | 16.8 | 17.4 | 17.4 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.7 | ±0.7 | ±0.5 | ±0.5 | ±0.4 | ±0.5 |
| Gain by Beam Tilt, average, dBi | 2° 13.1 10° 13.1 18° 12.8 | 2° 13.7 10° 13.4 18° 12.9 | 2° 16.1 7° 16.2 12° 16.0 | 2° 16.3 7° 16.7 12° 16.5 | 2° 16.5 7° 16.9 12° 16.8 | 2° 17.3 7° 17.7 12° 17.1 | 2° 17.2 7° 17.7 12° 17.2 |
| Beamwidth, Horizontal Tolerance, degrees | ±3.2 | ±5.1 | ±4.8 | ±3.9 | ±4.9 | ±5.7 | ±6.7 |
| Beamwidth, Vertical Tolerance, degrees | ±1.4 | ±1.9 | ±0.5 | ±0.3 | ±0.4 | ±0.3 | ±0.3 |
| USLS, beampeak to 20° above beampeak, dB | 15 | 20 | 14 | 16 | 17 | 16 | 16 |
| Front-to-Back Total Power at 180° ± 30°, dB | 20 | 23 | 27 | 27 | 26 | 24 | 24 |
| CPR at Boresight, dB | 15 | 16 | 21 | 20 | 21 | 22 | 22 |

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CPR at Sector, dB 10 10 12 12 9 5 4

Mechanical Specifications

Mechanical Tilt Range 0°-18°

 Wind Loading @ Velocity, frontal
 203.0 N @ 150 km/h (45.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 167.0 N @ 150 km/h (37.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 392.0 N @ 150 km/h (88.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 208.0 N @ 150 km/h (46.8 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
 1537 mm | 60.512 in

 Weight, gross
 26.3 kg | 57.982 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-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

