

12-Port Sector/multibeam antenna, 4x 617–894 MHz 65° HPBW and 8x 1695–2360 MHz 4x 33° HPBW, 5x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Each High Band antenna down tilt can be independently adjusted for greater flexibility in network optimization

General Specifications

Antenna Type Multibeam

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 MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector LocationBottom

RF Connector Quantity, high 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 High band (4) | Low band (1)

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

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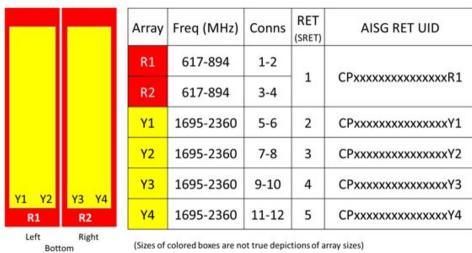


Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

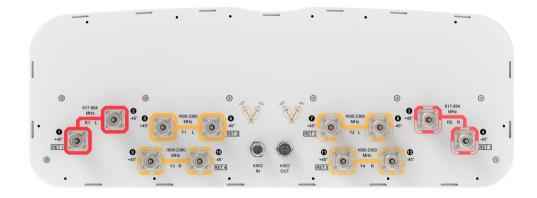
Width 640 mm | 25.197 in **Depth** 235 mm | 9.252 in Length 1224 mm | 48.189 in Net Weight, without mounting kit 40.1 kg | 88.405 lb

Array Layout



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

Port Configuration



Electrical Specifications



Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 617 – 894 MHz

Polarization ±45°

Total Input Power, maximum 1,000 W @ 50 °C

Electrical Specifications

| Frequency Band, MHz | 617-698 | 698-806 | 806-894 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
|--|------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 12.6 | 13.2 | 13.1 | 18.1 | 19 | 19.4 | 18.7 |
| Beam Centers, Horizontal, degrees | | | | ±27 | ±27 | ±27 | ±27 |
| Beamwidth, Horizontal, degrees | 72 | 63 | 64 | 36 | 35 | 32 | 29 |
| Beamwidth, Vertical, degrees | 21.3 | 18.8 | 16.4 | 7.4 | 6.9 | 6.5 | 5.8 |
| Beam Tilt, degrees | 5-22 | 5-22 | 5-18 | 2-10 | 2-10 | 2-10 | 2-10 |
| USLS (First Lobe), dB | 16 | 18 | 20 | 16 | 16 | 18 | 19 |
| Front-to-Back Ratio at 180°, dB | 29 | 33 | 27 | 35 | 36 | 36 | 31 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 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 | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 250 | 250 | 250 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 617-698 | 698-806 | 806-894 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
|---|---------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 12.3 | 12.8 | 12.7 | 17.4 | 18.6 | 19 | 18 |
| Gain by all Beam Tilts Tolerance, dB | ±0.6 | ±0.6 | ±0.8 | ±0.8 | ±0.5 | ±0.4 | ±1.5 |
| Gain by Beam Tilt, average, dBi | 5° 12.4 13° 12.3 22° 12.0 | 5° 13.0 13° 12.8 22° 12.3 | 5° 12.9 11° 12.8 18° 12.1 | 2° 17.3 6° 17.5 10° 17.5 | 2° 18.5 6° 18.7 10° 18.7 | 2° 18.9 6° 19.1 10° 18.9 | 2° 17.7 6° 18.1 10° 18.0 |
| Beamwidth, Horizontal Tolerance, degrees | ±6.6 | ±7.9 | ±10.7 | ±2 | ±1.8 | ±2.6 | ±3.4 |
| Beamwidth, Vertical Tolerance, degrees | ±2.1 | ±1.8 | ±1.2 | ±0.3 | ±0.2 | ±0.4 | ±0.2 |
| USLS, beampeak to 20° above | 15 | 15 | 16 | 15 | 16 | 17 | 17 |

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| beampeak, dB | | | | | | | |
|---|----|----|----|----|----|----|----|
| Front-to-Back Total Power at 180° ± 30°, dB | 21 | 22 | 21 | 26 | 29 | 29 | 25 |
| CPR at Boresight, dB | 18 | 19 | 18 | 18 | 20 | 19 | 12 |
| CPR at Sector, dB | 10 | 9 | 11 | | | | |
| CPR at 10 dB Horizontal Beamwidth. dB | | | | 12 | 12 | 13 | 4 |

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 505.0 N @ 150 km/h (113.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 156.0 N @ 150 km/h (35.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 520.0 N @ 150 km/h (116.9 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 752 mm | 29.606 in

 Depth, packed
 387 mm | 15.236 in

 Length, packed
 1379 mm | 54.291 in

 Weight, gross
 52.5 kg | 115.743 lb

Regulatory Compliance/Certifications

Agency Classification

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

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

