

12-port sector antenna, 4x 694-960,4x 1427–2690 and 4x 1695- 2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

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

12

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, mid band 8

RF Connector Quantity, low band 4

RF Connector Quantity, total

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 Low band (2) | Mid band (4)

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

COMMSC PE°

Width 430 mm | 16.929 in

Depth 197 mm | 7.756 in

Length 2100 mm | 82.677 in

Net Weight, antenna only 36.9 kg | 81.35 lb

Array Layout

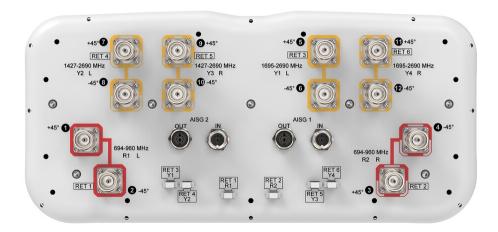


| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|---------------|--------------------|
| R1 | 694-960 | 1-2 | 1 | CPxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3-4 | 2 | CPxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxY1 |
| Y2 | 1427-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxY2 |
| Y3 | 1427-2690 | 9-10 | 5 | CPxxxxxxxxxxxxXY3 |
| Y4 | 1695-2690 | 11-12 | 6 | CPxxxxxxxxxxxxY4 |

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

Port Configuration

Bottom



Electrical Specifications

Impedance 50 ohm

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

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

Electrical Specifications

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|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|
| | R1,R2 | R1,R2 | R1,R2 | Y2,Y3 | Y2,Y3 | Y2,Y3 | Y2,Y3 | Y2,Y3 | Y1,Y4 | Y1,Y4 | Y1,Y4 | Y1,Y |
| Frequency Band, MHz | 694-80 | 6790-89 | 6890-96 | 01427-151 | 81695-199 | 001920-230 | 002300-250 | 002490-269 | 901695-199 | 01920-230 | 002300-250 | 02490 |
| RF Port | 1-4 | 1-4 | 1-4 | 7-10 | 7-10 | 7-10 | 7-10 | 7-10 | 5,6,11,12 | 5,6,11,12 | 5,6,11,12 | 5,6,1 |
| Gain at Mid Tilt, dBi | 14.6 | 15.1 | 15.2 | 15.3 | 16.7 | 17.5 | 17.9 | 17.6 | 16.9 | 17.8 | 18.3 | 18 |
| Beamwidth, Horizontal, degrees | 64 | 60 | 59 | 77 | 63 | 58 | 59 | 58 | 65 | 61 | 60 | 61 |
| Beamwidth, Vertical, degrees | 10.3 | 9.3 | 8.6 | 6.8 | 5.7 | 5.2 | 4.7 | 4.5 | 5.7 | 5.2 | 4.6 | 4.4 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 17 | 15 | 15 | 20 | 16 | 17 | 18 | 17 | 15 | 16 | 17 | 18 |
| Front-to- Back Ratio at 180°, dB | 28 | 31 | 29 | 31 | 34 | 33 | 33 | 32 | 31 | 30 | 33 | 34 |
| Front-to- Back Total Power at 180° ± 30°, dB | 21 | 22 | 22 | 22 | 27 | 27 | 27 | 26 | 25 | 25 | 27 | 25 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 26 | 27 | 27 | 27 | 27 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 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 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 |

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| Input Power | 300 | 300 | 300 | 250 | 250 | 250 | 200 | 200 | 250 | 250 | 200 | 200 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| per Port at 50°C, maximum, watts | | | | | | | | | | | | |

Electrical Specifications, BASTA

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|--|--------|---------|----------|------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| Frequency Band, MHz | 694-80 | 6790-89 | 96890-96 | 6 0 1427 – 15 1 | 181695-199 | 901920-23 | 002300-25 | 002490-26 | 901695–19 | 901920-23 | 002300-25 | 002490 |
| Gain by all Beam Tilts, average, dBi | 14.5 | 15 | 15.1 | 15.2 | 16.5 | 17.3 | 17.7 | 17.3 | 16.8 | 17.6 | 18.1 | 17.8 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.3 | ±0.5 | ±0.5 | ±0.8 | ±0.5 | ±0.4 | ±0.6 | ±1 | ±0.5 | ±0.4 | ±0.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±7 | ±6 | ±7 | ±10 | ±7 | ±4 | ±7 | ±5 | ±6 | ±7 | ±5 | ±5 |
| Beamwidth, Vertical Tolerance, degrees | ±0.6 | ±0.6 | ±0.6 | ±0.2 | ±0.4 | ±0.4 | ±0.3 | ±0.2 | ±0.4 | ±0.4 | ±0.2 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 17 | 15 | 14 | 15 | 16 | 17 | 16 | 16 | 14 | 15 | 17 | 17 |
| CPR at Boresight, dB | 23 | 23 | 22 | 18 | 22 | 21 | 17 | 15 | 20 | 21 | 18 | 19 |
| CPR at Sector, dB | 11 | 11 | 11 | 8 | 8 | 7 | 8 | -3 | 9 | 8 | 7 | 6 |

Mechanical Specifications

| 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) |

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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
 49.4 kg | 108.908 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

