

10-port, Multiband, DualPol® Planar Array ® Antenna, 2x 817-869, 8x 2490-2690 MHz, 65° HPBW, 2x RET with individual tilt available for the 850 MHz band and 2500 MHz bands.

- 1 column for 817-869 MHz and 4 columns for 2490-2690 MHz
- Two sets of AISG inputs for independent control of the internal RETs
- Integrated with a calibration board

OBSOLETE

This product was discontinued on: March 31, 2021

General Specifications

Antenna Type Sector

Band Multiband

Calibration Connector Interface N Female

Calibration Connector Quantity

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 Material Fiberglass, UV resistant

Radiator Material Copper | Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.1-9.5 DIN Female | 7-16 DIN Female

RF Connector Location Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, low band 2
RF Connector Quantity, total 10

Remote Electrical Tilt (RET) Information

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

RET Interface, quantity 2 female | 2 male

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Input Voltage 10-30 Vdc

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

Power Consumption, idle state, maximum 1 W

Power Consumption, normal conditions, maximum 10 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

 Width
 350 mm | 13.78 in

 Depth
 209 mm | 8.228 in

 Length
 1825 mm | 71.85 in

 Net Weight, without mounting kit
 26.5 kg | 58.422 lb

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 2490 – 2690 MHz | 817 – 869 MHZ

Polarization ±45°

Beam Forming Weights

| | | | Port 1 | Port 2 | Port 3 | Port 4 | Port 5 | Port 6 | Port 7 | Port 8 |
|------|-------------------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Tapered_Broadcast_65° for tilt0-3 | Amp(voltage) | 0.81 | 0 | 1 | 0 | 0.73 | 0 | 0.6 | 0 |
| P0 | | PHz | 0 | 0 | 115 | 0 | 100 | 0 | 0 | 0 |
| D4 | Tapered_Broadcast_65° for tilt0-3 | Amp(voltage) | 0 | 0.81 | 0 | 1 | 0 | 0.73 | 0 | 0.6 |
| P1 | | PHz | 0 | 0 | 0 | 115 | 0 | 100 | 0 | 0 |
| ъ. | Tapered_Broadcast_65° for tilt4-8 | Amp(voltage) | 0.81 | 0 | 1 | 0 | 0.73 | 0 | 0.6 | 0 |
| PO | | PHz | 0 | 0 | 130 | 0 | 100 | 0 | 7 | 0 |
| D1 | Tapered_Broadcast_65° for tilt4-8 | Amp(voltage) | 0 | 0.81 | 0 | 1 | 0 | 0.73 | 0 | 0.6 |
| P1 | | PHz | 0 | 0 | 0 | 130 | 0 | 100 | 0 | 7 |
| - | FullPower_Broadcast_65° for tilt0-8 | Amp(voltage) | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PO | | PHz | 80 | 57 | 0 | 137 | 0 | 0 | 0 | 0 |
| P1 | FullPowerBroadcast_65° for tilt0-8 | Amp(voltage) | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| PI | | PHz | 0 | 0 | 0 | 0 | 80 | -123 | 0 | -43 |
| +45 | Service Beam_0° for tilt0-8 | Amp(voltage) | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| +45 | | PHz | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -45 | Service Beam_0° for tilt0-8 | Amp(voltage) | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| -45 | | PHz | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Service Beam_30° for tilt0-8 | Amp(voltage) | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| +45 | | PHz | 0 | 0 | 120 | 0 | -120 | 0 | 0 | 0 |
| 45 | Service Beam_30° for tilt0-8 | Amp(voltage) | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| -45 | | PHz | 0 | 0 | 0 | 120 | 0 | -120 | 0 | 0 |
| . 45 | Service Beam30° for tilt0-8 | Amp(voltage) | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| +45 | | PHz | 0 | 0 | -120 | 0 | 120 | 0 | 0 | 0 |
| 45 | Service Beam30° for tilt0-8 | Amp(voltage) | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| -45 | | PHz | 0 | 0 | 0 | -120 | 0 | 120 | 0 | 0 |

Electrical Specifications



| Frequency Band, MHz | 817-869 | 2490-2690 |
|---------------------------------------------|-------------------------------|-------------------------------|
| Gain, dBi | 16.3 | 18.3 |
| Beamwidth, Horizontal, degrees | 62 | 69 |
| Beamwidth, Vertical, degrees | 10.6 | 4.3 |
| Beam Tilt, degrees | 0-8 | 0-6 |
| USLS (First Lobe), dB | 19 | 16 |
| Front-to-Back Ratio at 180°, dB | 28 | 28 |
| Isolation, Cross Polarization, dB | 28 | 27 |
| Isolation, Inter-band, dB | 30 | 30 |
| VSWR Return loss, dB | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 |
| Input Power per Port, maximum, watts | 300 | 50 |
| Electrical Specifications, BASTA | | |
| Frequency Band, MHz | 817-869 | 2490-2690 |
| Gain by all Beam Tilts, average, dBi | 16.1 | 17.9 |
| Gain by all Beam Tilts Tolerance, dB | ±0.2 | ±0.5 |
| Gain by Beam Tilt, average, dBi | 0° 16.1 4° 16.2 8° 16.0 | 0° 18.0 3° 18.0 6° 17.7 |
| Beamwidth, Horizontal Tolerance, degrees | ±0.6 | ±9.6 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 19 | 16 |
| Front-to-Back Total Power at 180° ± 30°, dB | 27 | 24 |
| CPR at Boresight, dB | 21 | 18 |
| CPR at Sector, dB | 16 | 8 |
| Electrical Specifications, Broadca | ast 65° | |
| Frequency Band, MHz | | 2490-2690 |
| Gain, dBi | | 16.8 |
| Beamwidth, Horizontal, degrees | | 68 |
| Beamwidth, Horizontal Tolerance, degrees | | ±7 |
| Beamwidth, Vertical, degrees | | 4.3 |
| Beamwidth, Vertical Tolerance, degrees | | ±0.2 |
| CPR at Boresight, dB | | 19 |
| CPR at Sector, dB | | 4 |
| Front-to-Back Total Power at 180° ± 30°, dB | | 25.7 |
| | | |

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Null Fill, dB 25.7

Electrical Specifications, Service Beam

| Frequency Band, MHz | 2490-2690 |
|------------------------------------------------------------|-----------|
| Steered 0° Gain, dBi | 23.7 |
| Steered 0° Gain Tolerance, dBi | ±0.5 |
| Steered 0° Beamwidth, Horizontal, degrees | 20 |
| Steered 0° CPR at Beampeak, dB | 22 |
| Steered 0° Horizontal Sidelobe, dB | 11 |
| Steered 13° USLS (First Lobe), dB | 5 |
| Steered 30° Gain, dBi | 21.4 |
| Steered 30° Gain Tolerance, dBi | ±1.4 |
| Steered 30° Beamwidth, Horizontal, degrees | 22 |
| Steered 30° Horizontal Sidelobe, dB | 5 |
| Steered 42° Front-to-Back Total Power at 180° ± 30°, dB | 14 |

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 253.0 N @ 150 km/h (56.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 637.0 N @ 150 km/h (143.2 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)

Packaging and Weights

 Width, packed
 464 mm | 18.268 in

 Depth, packed
 357 mm | 14.055 in

 Length, packed
 1971 mm | 77.598 in

 Weight, gross
 40.1 kg | 88.405 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



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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

Dimensions

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity

Weight, gross 6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--------------------------------------------------------------------------------|
| CE | Compliant with the relevant CE product directives |
| 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 |
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