



12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications.
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs.
- Independent tilt for all arrays.
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	15.7	16.1	17.0	17.5	17.7	17.8
Beamwidth, Horizontal, degrees	75	73	58	59	61	59
Beamwidth, Vertical, degrees	9.7	8.6	7.9	7.4	7.0	6.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	19	17	18	20	18
Front-to-Back Ratio at 180°, dB	32	33	39	42	39	40
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

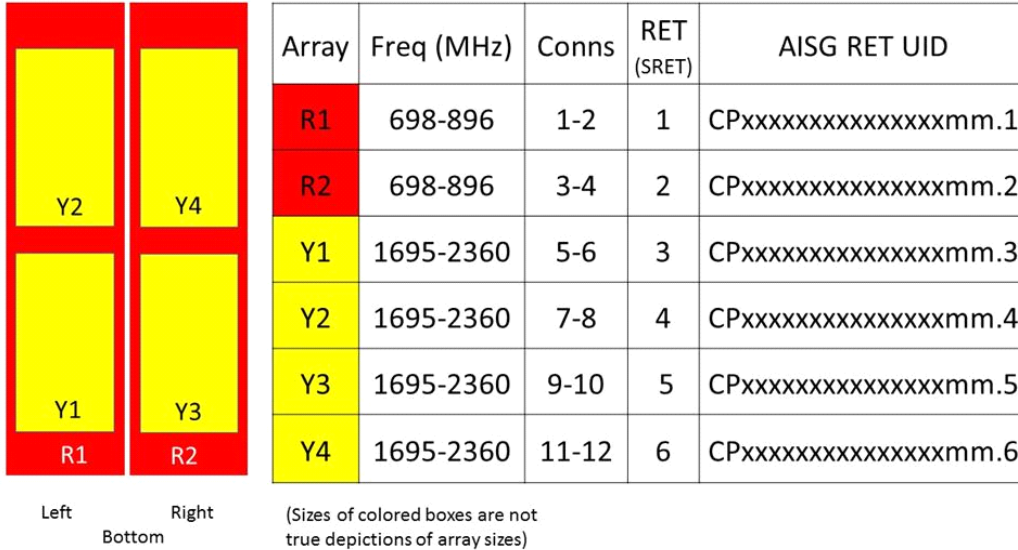
Electrical Specifications, BASTA*

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	15.2	15.9	16.5	17.1	17.2	17.3
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.4	±0.8	±0.6	±0.6	±0.7
Gain by Beam Tilt, average, dBi	2 ° 15.2 7 ° 15.3 12 ° 15.1	2 ° 15.8 7 ° 16.0 12 ° 15.7	2 ° 16.6 7 ° 16.8 12 ° 16.2	2 ° 17.1 7 ° 17.4 12 ° 16.7	2 ° 17.1 7 ° 17.6 12 ° 16.9	2 ° 17.1 7 ° 17.6 12 ° 16.9
Beamwidth, Horizontal Tolerance, degrees	±2.4	±2.1	±4.8	±2.4	±3.2	±3.8
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.5	±0.4	±0.3	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	16	17	14	15	16	16

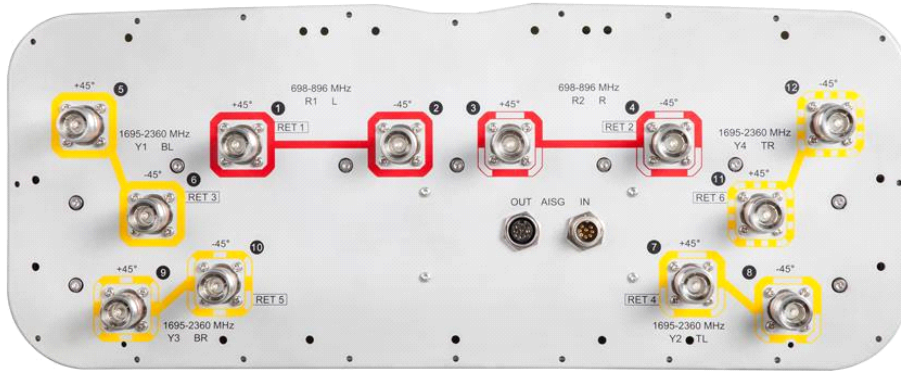
Front-to-Back Total Power at 180° ± 30°, dB	23	22	31	33	29	27
CPR at Boresight, dB	22	24	20	21	21	20
CPR at Sector, dB	9	6	9	9	8	8

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

Array Layout



Port Configuration



General Specifications

Operating Frequency Band	1695 – 2360 MHz 698 – 896 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Total Input Power, maximum	900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	12
RF Connector Quantity, low band	4
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	954.0 N @ 150 km/h 214.5 lbf @ 150 km/h

Wind Loading, lateral	331.0 N @ 150 km/h 74.4 lbf @ 150 km/h
Wind Loading, maximum	1235.0 N @ 150 km/h 277.6 lbf @ 150 km/h
Effective Projected Area (EPA), frontal	0.90 m ² 9.69 ft ²
Effective Projected Area (EPA), lateral	0.31 m ² 3.34 ft ²
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	2438.0 mm 96.0 in
Width	498.0 mm 19.6 in
Depth	197.0 mm 7.8 in
Net Weight, without mounting kit	46.3 kg 102.1 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Packed Dimensions

Length	2620.0 mm 103.1 in
Width	608.0 mm 23.9 in
Depth	352.0 mm 13.9 in
Shipping Weight	67.8 kg 149.5 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)



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.

BSAMNT-M — Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance