

10-port sector antenna, 2x 694–960 MHz 65° HPBW, 4x 1695-2690 MHz 65° HPBW and 2x 1695-2180 MHz 2x 33° HPBW, 5x RET with manual override. Bands cascaded SRET

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in "Cascaded SRET" configuration

Electrical Specifications

| | LB | LB | LB | НВ | НВ | НВ | HB-Dual-Beam2 | HB-Dual-Beam2 |
|---|------------|------------|------------|------------|------------|------------|---------------|---------------|
| Frequency Band, MHz | 694–790 | 790-890 | 890-960 | 1695-1920 | 1920–2180 | 2300-2690 | 1695–1920 | 1920–2180 |
| Gain, dBi | 16.2 | 16.5 | 16.7 | 17.5 | 18.2 | 18.8 | 17.2 | 18.8 |
| Beam Centers, Horizontal, degrees | | | | | | | ±31 | ±28 |
| Beamwidth, Horizontal, degrees | 69 | 68 | 68 | 62 | 62 | 61 | 36 | 32 |
| Beamwidth, Vertical, degrees | 10.1 | 8.9 | 8.3 | 7.5 | 6.7 | 5.5 | 7.7 | 6.9 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Null Fill, dB | -22 | -22 | -22 | -22 | -22 | -22 | -22 | -22 |
| Front-to-Back Ratio at 180°, dB | 31 | 33 | 34 | 35 | 38 | 38 | 28 | 33 |
| Front-to-Back Total Power at 180° ± 30°, dB | 27 | 27 | 27 | 27 | 27 | 29 | 24 | 27 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 30 | 30 | 30 | 25 | 25 |
| Isolation, Beam to Beam, dB | | | | | | | 18 | 18 |
| 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 | 1.43 15.0 | 1.43 15.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port, maximum, watts | 300 | 300 | 300 | 250 | 250 | 250 | 250 | 250 |
| Polarization | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 694–790 | 790–890 | 890-960 | 1695–1920 | 1920–2180 | 2300-2690 | 1695–1920 | 1920-2180 |
|---|---|---|---|---|---|---|---|---|
| Gain by all Beam Tilts, average, dBi | 15.9 | 16.4 | 16.6 | 17.1 | 17.9 | 18.3 | 16.4 | 18.4 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.2 | ±0.2 | ±0.6 | ±0.4 | ±0.6 | ±1.2 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 0 ° 15.9 5 ° 15.9 10 ° 15.9 | 0 ° 16.4 5 ° 16.4 10 ° 16.5 | 0 ° 16.6 5 ° 16.7 10 ° 16.5 | 0 ° 17.1 5 ° 17.1 10 ° 17.2 | 0 ° 18.0 5 ° 18.0 10 ° 17.8 | 0 ° 18.3 5 ° 18.3 10 ° 18.2 | 0 ° 16.4 5 ° 16.3 10 ° 16.4 | 0 ° 18.4 5 ° 18.4 10 ° 18.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±0.8 | ±0.6 | ±1 | ±2.9 | ±2.8 | ±5.8 | ±2 | ±2.3 |
| Beamwidth, Vertical Tolerance, degrees | ±0.6 | ±0.4 | ±0.3 | ±0.5 | ±0.5 | ±0.4 | ±0.4 | ±0.4 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| CPR at Boresight, dB | 15 | 16 | 16 | 20 | 20 | 20 | 12 | 10 |
| CPR at Sector, dB | 11 | 11 | 13 | 11 | 11 | 8 | 7 | 5 |

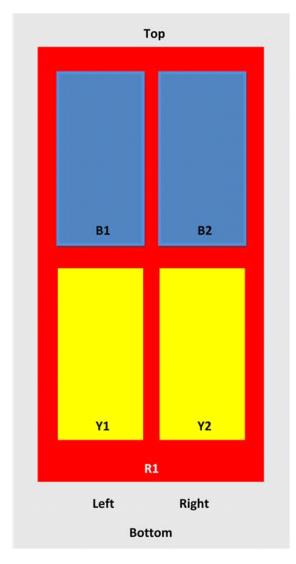
^{*} CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, <u>download the whitepaper Time to Raise the Bar on BSAs</u>.

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Array Layout

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| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|---------------|-------|---------------|---|
| R1 | 694-960 | 1-2 | 1 | ARxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| Bl | 1695-2180 | 3-4 | 2 | ARxxxxxxxxxxxxxxxxx2 |
| B2 | 1695-2180 | 5-6 | 3 | ARxxxxxxxxxxxxxxxxx |
| Y1 | 1695-2690 | 7-8 | 4 | ARxxxxxxxxxxxxxx4 |
| Y2 | 1695-2690 | 9-10 | 5 | ARxxxxxxxxxxxxxxxxxxxx |

View from the front of the antenna

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

General Specifications

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RVV2NPX310211R

Operating Frequency Band 1695 – 2180 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Antenna TypeSectorBandMultibandPerformance NoteOutdoor usage

Mechanical Specifications

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

RF Connector Interface 7-16 DIN Female

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

Radiator MaterialLow loss circuit boardRadome MaterialFiberglass, UV resistant

Reflector MaterialAluminumRF Connector LocationBottom

 Wind Loading, frontal
 111.1 lbf @ 150 km/h | 493.0 N @ 150 km/h

 Wind Loading, lateral
 423.0 N @ 150 km/h | 95.1 lbf @ 150 km/h

Wind Loading, maximum 1044.0 N @ 150 km/h

234.7 lbf @ 150 km/h

Wind Speed, maximum 241 km/h | 150 mph

Dimensions

 Length
 2763.5 mm | 108.8 in

 Width
 350.0 mm | 13.8 in

 Depth
 208.0 mm | 8.2 in

 Net Weight, without mounting kit
 46.1 kg | 101.6 lb

Remote Electrical Tilt (RET) Information

Input Voltage 10–30 Vdc

Internal RET High band (4) | Low band (1)

Power Consumption, idle state, maximum 2 W Power Consumption, normal conditions, maximum 13 W

Protocol 3GPP/AISG 2.0 (Single RET)

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

RET Interface, quantity 1 female | 1 male

Packed Dimensions

 Length
 2985.0 mm | 117.5 in

 Width
 436.0 mm | 17.2 in

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320.0 mm | 12.6 in **Depth Shipping Weight** 68.5 kg | 151.0 lb

Regulatory Compliance/Certifications

Agency

Classification

RoHS 2011/65/EU

Compliant by Exemption

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

China RoHS SJ/T 11364-2014 CE

Above Maximum Concentration Value (MCV)

Compliant with the relevant CE product directives









Included Products

T-029-GL-E — Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance