PRODUCT DATASHEET

**APXVBB15B_43-C-I20**

4-Ports, X-Pol, Panel Antenna, 1.5m, 2x 698-960MHz 65deg, Integrated RET

### FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (698-960MHz)
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW Version: 2.02
- Compliant with AISG V2.0 and 3GPP



## Technical features

### ELECTRICAL SPECIFICATIONS

| Electrical Specification Header | | LOW BAND ARRAY (698-960 MHZ) [R1] | | |
|---|---|---|---|---|
| **Frequency Band** | MHz | 698 - 806 | 790 - 894 | 880 - 960 |
| **Gain Typical** | dBi | 15 | 15.2 | 15.7 |
| **Gain Over all Tilts** | dBi | 14 +/- 1 | 14.7 +/- 0.5 | 15.2 +/- 0.5 |
| **Azimuth Beamwidth 3dB** | Deg | 60.4 +/- 4 | 59.2 +/- 5.5 | 63.5 +/- 3.5 |
| **Elevation Beamwidth 3dB** | Deg | 16.7 +/- 1 | 15.5 +/- 1 | 14.3 +/- 0.5 |
| **Cross Polar Discrimination at Boresight** | dB | 24 | 27 | 23 |
| **Cross Polar Discrimination over Sector** | dB | 13 | 9.7 | 8 |
| **F/B at +/-30deg Total Power** | dB | 21 | 21 | 22 |
| **First Upper Side Lobe Suppression** | dB | 14.8 | 21.9 | 16 |
| **Electrical Downtilt** | Deg | 2 to 15 | | |
| **Cross Polar Isolation** | dB | 26 | | |
| **Interband Isolation** | dB | 26 | | |
| **VSWR** | - | 1.5 | | |
| **Passive Intermodulation (3rd Order, 2 x 43dBm)** | dBc | -153 | | |
| **Maximum Effective Power per Port** | Watt | 350 | | |



All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering.

## ELECTRICAL SPECIFICATIONS

| | | | | |
|---|---|---|---|---|
| **Electrical Specification Header** | | LOW BAND ARRAY (698-960 MHZ) [R2] | | |
| **Frequency Band** | MHz | 698 - 806 | 790 - 894 | 880 - 960 |
| **Gain Typical** | dBi | 15.2 | 16.1 | 15.9 |
| **Gain Over all Tilts** | dBi | 14.2 +/- 1 | 15.1 +/- 1 | 15.4 +/- 0.5 |
| **Azimuth Beamwidth 3dB** | Deg | 60.7 +/- 4 | 58.6 +/- 4.5 | 63.7 +/- 3.9 |
| **Elevation Beamwidth 3dB** | Deg | 16.8 +/- 1 | 15.4 +/- 1 | 14.2 +/- 0.5 |
| **Cross Polar Discrimination at Boresight** | dB | 27 | 28 | 26 |
| **Cross Polar Discrimination over Sector** | dB | 14 | 8.4 | 7 |
| **F/B at +/-30deg Total Power** | dB | 22 | 22 | 23 |
| **First Upper Side Lobe Suppression** | dB | 16 | 21 | 15 |
| **Electrical Downtilt** | Deg | 2 to 15 | | |
| **Cross Polar Isolation** | dB | 26 | | |
| **Interband Isolation** | dB | 26 | | |
| **VSWR** | - | 1.5 | | |
| **Passive Intermodulation (3rd Order, 2 x 43dBm)** | dBc | -153 | | |
| **Maximum Effective Power per Port** | Watt | 350 | | |

## ELECTRICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Impedance** | Ohm | 50 |
| **Polarization** | Deg | ±45° |

## MECHANICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Dimensions - H x W x D** | mm (in) | 1440 x 499 x 199 (56.7 x 19.6 x 7.8) |
| **Weight (Antenna Only)** | kg (lb) | 24.5 (54) |
| **Weight (Mounting Hardware only)** | kg (lb) | 4.5 (9.9) |
| **Packing size- HxWxD** | mm (in) | 1685 x 570 x 275 (66.3 x 22.4 x 10.8) |
| **Shipping Weight** | kg (lb) | 35 (77.2) |
| **Connector type** | | 4 x 4.3-10 Female at bottom + 2 AISG connectors (1 male, 1 female) |
| **Radome Material / Color** | | Fiberglass / Light Grey RAL7035 |

## TESTING AND ENVIRONMENTAL

| | | |
|---|---|---|
| **Temperature Range** | °C (°F) | -40 to 60 (-40 to 140 ) |
| **Lightning protection** | | Direct Ground |
| **Survival/Rated Wind Velocity** | km/h | 200 (150 ) |
| **Wind Load @Rated Wind Front** | N | 526 |
| **Wind Load @Rated Wind Side** | N | 459 |
| **Wind Load @Rated Wind Rear** | N | 610 |

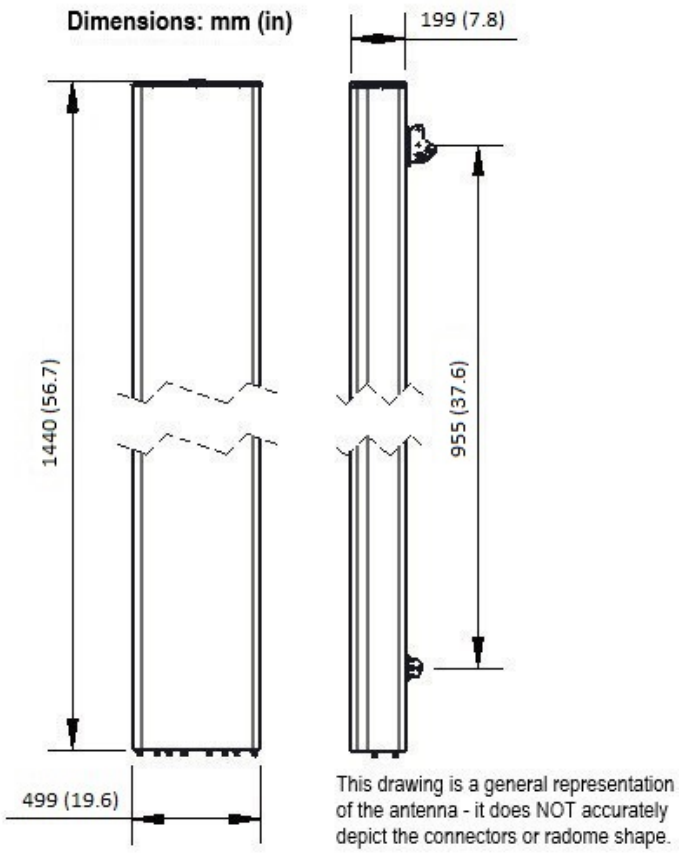
## ORDERING INFORMATION

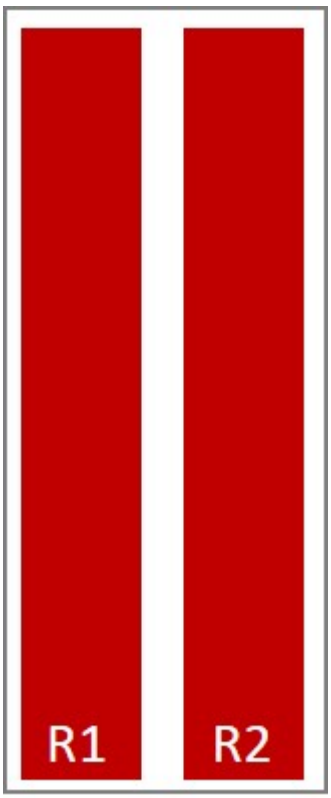
| Order No. | Configuration | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|---|---|---|---|---|
| **APXVBB15B_43-C-I20** | Internal RET (ACU-I20-B2) | APM50-B1 | 50-110mm | 35 kg |



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External Document Links
APM50_Series_Installation_Instructions

Notes
- All electrical parameters are compliant with BASTA NGMN 11.1 requirements.
- For additional mounting information please click "External Document Links".
- **Radiating patterns:** Request pattern files



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