



APXVB3L20B-C-I20

Quadband X-pol Antenna, 698-960/1710-2690/1710-2690/1710-2690MHz, 65deg, 16.3/16.9/16.3/16.9dBi, 2.0m, 2-12/2-11deg, Integrated RET

FEATURES / BENEFITS

- 2 ports / 1 system in low band
- 6 ports / 3 systems in high band
- Integrated RET platform
- SRET -Field replaceable / ACU HW Version -2.02 / SW Version -2.72
- 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 - 896 | 870 - 960 |
| Gain Typical | dBi | 15.4 | 16.0 | 16.3 |
| Gain Over all Tilts | dBi | 14.9 +/- 0.5 | 15.5 +/- 0.5 | 15.8 +/- 0.5 |
| Azimuth Beamwidth 3dB | Deg | 68.0+/-1.6 | 65.9+/-2 | 65.3+/-1.5 |
| Elevation Beamwidth 3dB | Deg | 11.8 +/- 1 | 10.3 +/- 0.5 | 9.4 +/- 0.5 |
| Cross Polar Discrimination at Boresight | dB | 26 | 25 | 24 |
| Cross Polar Discrimination over Sector | dB | 11.5 | 8 | 9 |
| F/B at +/-30deg Total Power | dB | 24.4 | 25 | 25 |
| First Upper Side Lobe Suppression | dB | 15 | 15 | 16 |
| Electrical Downtilt | Deg | 2 to 12 | | |
| 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 | | |



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ELECTRICAL SPECIFICATIONS

| Electrical Specification Header | | HIGH BAND ARRAY (1710-2690 MHZ) [Y1] | | | | |
|--|------|--------------------------------------|--------------|--------------|--------------|--------------|
| Frequency Band | MHz | 1710 - 1880 | 1850 - 1990 | 1920 - 2200 | 2300 - 2400 | 2500 - 2690 |
| Gain Typical | dBi | 16.0 | 16.2 | 16.9 | 15.9 | 16.1 |
| Gain Over all Tilts | dBi | 15 +/- 1 | 15.7 +/- 0.5 | 16.4 +/- 0.5 | 15.4 +/- 0.5 | 15.6 +/- 0.5 |
| Azimuth Beamwidth 3dB | Deg | 62.7 +/- 4.5 | 65.1 +/- 4 | 64.7 +/- 6.4 | 68.2 +/- 5 | 61 +/- 3.1 |
| Elevation Beamwidth 3dB | Deg | 9.9 +/- 1 | 9.2 +/- 0.5 | 8.5 +/- 0.5 | 7.8 +/- 0.6 | 7.3 +/- 0.5 |
| Cross Polar Discrimination at Boresight | dB | 19.8 | 23 | 15 | 11.8 | 12.9 |
| Cross Polar Discrimination over Sector | dB | 10 | 9.8 | 6 | 7.6 | 5 |
| F/B at +/-30deg Total Power | dB | 19.7 | 22 | 21 | 19 | 19.6 |
| First Upper Side Lobe Suppression | dB | 13.1 | 13 | 12 | 11.4 | 13.9 |
| Electrical Downtilt | Deg | 2 to 11 | | | | |
| 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 | 250 | | | | |

ELECTRICAL SPECIFICATIONS

| Electrical Specification Header | | HIGH BAND ARRAY (1710-2690 MHZ) [Y2] | | | | |
|--|------|--------------------------------------|--------------|--------------|--------------|--------------|
| Frequency Band | MHz | 1710 - 1880 | 1850 - 1990 | 1920 - 2200 | 2300 - 2400 | 2500 - 2690 |
| Gain Typical | dBi | 15.1 | 15.1 | 16.3 | 15.1 | 16.3 |
| Gain Over all Tilts | dBi | 14.6 +/- 0.5 | 15 +/- 0.1 | 15.7 +/- 0.6 | 14.5 +/- 0.6 | 15.3 +/- 1 |
| Azimuth Beamwidth 3dB | Deg | 61.7 +/- 8.4 | 66.9 +/- 4.5 | 65.7 +/- 6.9 | 69.9 +/- 4.6 | 62.2 +/- 2.6 |
| Elevation Beamwidth 3dB | Deg | 10.1 +/- 1 | 9.3 +/- 0.5 | 8.5 +/- 0.5 | 8 +/- 0.5 | 7.4 +/- 0.5 |
| Cross Polar Discrimination at Boresight | dB | 21 | 21 | 20 | 13 | 14.7 |
| Cross Polar Discrimination over Sector | dB | 8.9 | 9 | 6.5 | 7 | 5 |
| F/B at +/-30deg Total Power | dB | 19.3 | 21 | 21 | 16.9 | 18.7 |
| First Upper Side Lobe Suppression | dB | 13.6 | 12.1 | 12.9 | 11.7 | 14.0 |
| Electrical Downtilt | Deg | 2 to 11 | | | | |
| 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 | 250 | | | | |



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ELECTRICAL SPECIFICATIONS

| Electrical Specification Header | | HIGH BAND ARRAY (1710-2690 MHZ) [Y3] | | | | |
|--|------|--------------------------------------|--------------|--------------|--------------|--------------|
| Frequency Band | MHz | 1710 - 1880 | 1850 - 1990 | 1920 - 2200 | 2300 - 2400 | 2500 - 2690 |
| Gain Typical | dBi | 15.9 | 16.2 | 16.9 | 15.8 | 15.9 |
| Gain Over all Tilts | dBi | 14.9 +/- 1 | 15.7 +/- 0.5 | 16.4 +/- 0.5 | 15.3 +/- 0.5 | 15.4 +/- 0.5 |
| Azimuth Beamwidth 3dB | Deg | 61.7 +/- 3.5 | 63.2 +/- 3.2 | 64.1 +/- 7.5 | 67.6 +/- 4.4 | 61 +/- 2.8 |
| Elevation Beamwidth 3dB | Deg | 10 +/- 1 | 9.3 +/- 0.5 | 8.5 +/- 0.5 | 8 +/- 0.9 | 7.2 +/- 0.5 |
| Cross Polar Discrimination at Boresight | dB | 19.9 | 21 | 15 | 10 | 13 |
| Cross Polar Discrimination over Sector | dB | 10 | 9.8 | 7 | 7 | 5.5 |
| F/B at +/-30deg Total Power | dB | 19.8 | 22 | 22 | 18 | 18.1 |
| First Upper Side Lobe Suppression | dB | 11.8 | 11.8 | 11.8 | 10.2 | 12 |
| Electrical Downtilt | Deg | 2 to 11 | | | | |
| 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 | 250 | | | | |

ELECTRICAL SPECIFICATIONS

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

MECHANICAL SPECIFICATIONS

| | | |
|---------------------------------|---------|---|
| Dimensions - H x W x D | mm (in) | 1960 x 350 x 200 (77.2 x 13.8 x 7.9) |
| Weight (Antenna Only) | kg (lb) | 22.5 (49.6) |
| Weight (Mounting Hardware only) | kg (lb) | 5.5 (12.1) |
| Packing size- HxWxD | mm (in) | 2240 x 425 x 275 (88.2 x 16.7 x 10.8) |
| Shipping Weight | kg (lb) | 35.5 (78.3) |
| Connector type | | 8 x 7/16 female/bottom + 2 AISG connectors (1 male, 1 female) |
| Radome Material / Color | | Fiberglass / Light Gray |

TESTING AND ENVIRONMENTAL

| | | |
|------------------------------|---------|-------------------------|
| Temperature Range | °C (°F) | -40 to 60 (-40 to 140) |
| Lightning protection | | DC Ground |
| Survival/Rated Wind Velocity | km/h | 220 (160) |
| Wind Load @Rated Wind Front | N | 842 |
| Wind Load @Rated Wind Side | N | 481 |
| Wind Load @Rated Wind Rear | N | 1025 |

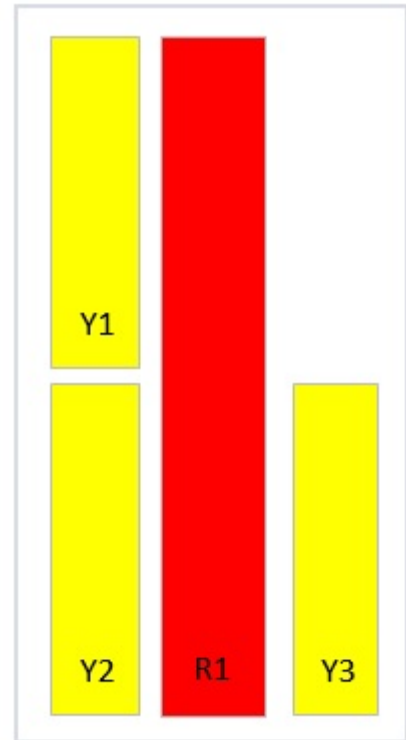
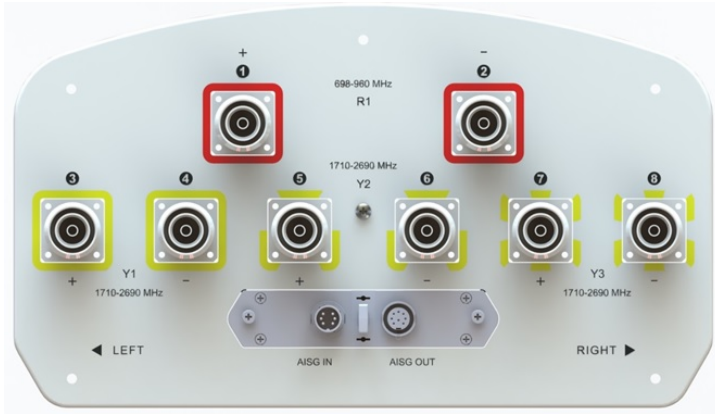
ORDERING INFORMATION

| Order No. | Configuration | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|------------------|---------------------------|-------------------|------------------------|-----------------|
| APXVB3L20B-C-I20 | Internal RET (ACU-I20-B4) | APM50-B1 | 50-110 mm | 35.5 Kg |

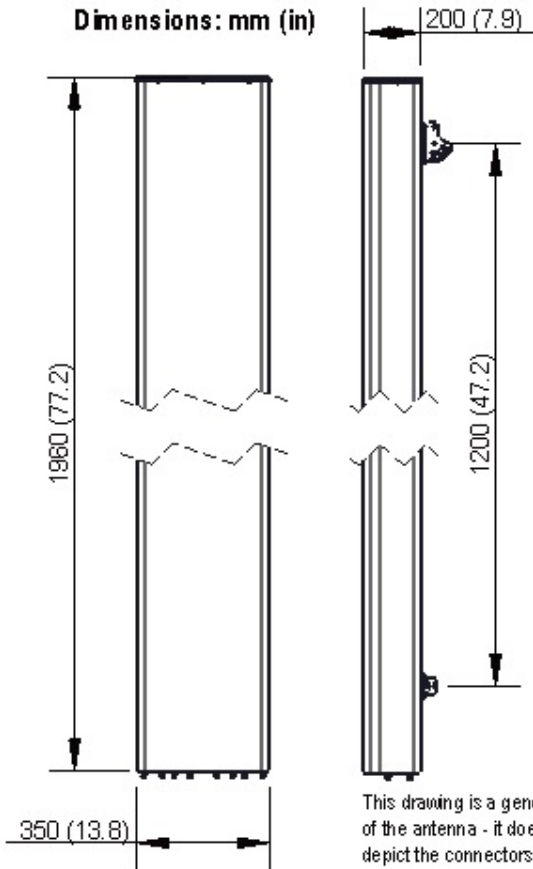


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16.3/16.9/16.3/16.9dBi, 2.0m, 2-12/2-11deg, Integrated RET



Dimensions: mm (in)



This drawing is a general representation of the antenna - it does NOT accurately depict the connectors or radome shape.



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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](#)