



**FEATURES / BENEFITS**

- 2 ports / 1 cross pol system in low band (690-960 MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690 MHz)
- Manual VET



**Technical features**

**ELECTRICAL SPECIFICATIONS**

| Electrical Specification Header                |      | LOW BAND ARRAY (690-960 MHz) [R1] |              |              |
|--|------|-----------------------------------|--------------|--------------|
| Frequency Band                                 | MHz  | 690-806                           | 790-894      | 880-960      |
| Gain Typical                                   | dBi  | 16.2                              | 16.2         | 16.4         |
| Gain Over all Tilts                            | dBi  | 15.7 +/- 0.5                      | 16 +/- 0.2   | 16.1 +/- 0.3 |
| Azimuth Beamwidth 3dB                          | Deg  | 67.7 +/- 2.1                      | 64.9 +/- 1.9 | 62.1 +/- 1.5 |
| Elevation Beamwidth 3dB                        | Deg  | 12 +/- 1.1                        | 10.7 +/- 0.6 | 10 +/- 0.7   |
| Cross Polar Discrimination at Boresight        | dB   | 26.8                              | 30.4         | 25.3         |
| Cross Polar Discrimination over Sector         | dB   | 10.2                              | 8.9          | 7.3          |
| F/B at +/-30deg Total Power                    | dB   | 24.9                              | 25.1         | 24.6         |
| First Upper Side Lobe Suppression              | dB   | 18.3                              | 19.4         | 17.6         |
| Electrical Downtilt                            | Deg  | 2 to 12                           |              |              |
| Cross Polar Isolation                          | dB   | 28                                |              |              |
| Interband Isolation                            | dB   | 28                                |              |              |
| 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 (1695-2690 MHZ) [Y1] |              |              |              |              |
|--|------|--------------------------------------|--------------|--------------|--------------|--------------|
| Frequency Band                                 | MHz  | 1695-1880                            | 1850-1990    | 1920-2170    | 2300-2400    | 2490-2690    |
| Gain Typical                                   | dBi  | 18.6                                 | 19.1         | 19.3         | 19.1         | 19.5         |
| Gain Over all Tilts                            | dBi  | 18.3 +/- 0.3                         | 18.8 +/- 0.3 | 19 +/- 0.3   | 18.7 +/- 0.4 | 19 +/- 0.5   |
| Azimuth Beamwidth 3dB                          | Deg  | 68.8 +/- 7.4                         | 61.5 +/- 6   | 63.5 +/- 5.6 | 66.6 +/- 2.1 | 64.7 +/- 2.9 |
| Elevation Beamwidth 3dB                        | Deg  | 5.3 +/- 0.3                          | 5 +/- 0.3    | 4.7 +/- 0.4  | 4.1 +/- 0.2  | 3.9 +/- 0.2  |
| Cross Polar Discrimination at Boresight        | dB   | 25.4                                 | 24.8         | 24.2         | 27.5         | 28.9         |
| Cross Polar Discrimination over Sector         | dB   | 9.8                                  | 8.8          | 8.8          | 9.3          | 1.9          |
| F/B at +/-30deg Total Power                    | dB   | 21.9                                 | 28           | 27           | 23.2         | 20.9         |
| First Upper Side Lobe Suppression              | dB   | 20.2                                 | 19.7         | 19.9         | 18.3         | 17.6         |
| Electrical Downtilt                            | Deg  | 2 to 10                              |              |              |              |              |
| Cross Polar Isolation                          | dB   | 28                                   |              |              |              |              |
| Interband Isolation                            | dB   | 28                                   |              |              |              |              |
| 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 (1695-2690 MHZ) [Y2] |              |              |              |              |
|--|------|--------------------------------------|--------------|--------------|--------------|--------------|
| Frequency Band                                 | MHz  | 1695-1880                            | 1850-1990    | 1920-2170    | 2300-2400    | 2490-2690    |
| Gain Typical                                   | dBi  | 18.6                                 | 19.2         | 19.3         | 19.1         | 19.2         |
| Gain Over all Tilts                            | dBi  | 18.2 +/- 0.4                         | 18.7 +/- 0.5 | 18.9 +/- 0.4 | 18.6 +/- 0.5 | 18.7 +/- 0.5 |
| Azimuth Beamwidth 3dB                          | Deg  | 68.8 +/- 7                           | 60.9 +/- 5.7 | 62.9 +/- 5.5 | 66.1 +/- 2.1 | 64.7 +/- 2.6 |
| Elevation Beamwidth 3dB                        | Deg  | 5.3 +/- 0.3                          | 5 +/- 0.3    | 4.7 +/- 0.4  | 4.2 +/- 0.2  | 3.9 +/- 0.2  |
| Cross Polar Discrimination at Boresight        | dB   | 26.4                                 | 26.9         | 26.5         | 26.3         | 26.4         |
| Cross Polar Discrimination over Sector         | dB   | 8.8                                  | 7.3          | 8.1          | 8.7          | 2            |
| F/B at +/-30deg Total Power                    | dB   | 21.5                                 | 26.4         | 26.5         | 23.1         | 20.5         |
| First Upper Side Lobe Suppression              | dB   | 20.8                                 | 19.1         | 19.2         | 15.8         | 15.7         |
| Electrical Downtilt                            | Deg  | 2 to 10                              |              |              |              |              |
| Cross Polar Isolation                          | dB   | 28                                   |              |              |              |              |
| Interband Isolation                            | dB   | 28                                   |              |              |              |              |
| 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**

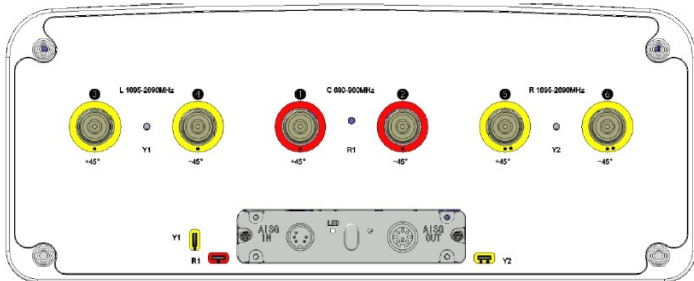
|                                 |         |                                       |
|---------------------------------|---------|---------------------------------------|
| Dimensions - H x W x D          | mm (in) | 1798 x 378 x 158 (70.8 x 14.9 x 6.2)  |
| Weight (Antenna Only)           | kg (lb) | 23.5 (51.8)                           |
| Weight (Mounting Hardware only) | kg (lb) | 4 (8.8)                               |
| Packing size- HxWxD             | mm (in) | 1998 x 473 x 278 (78.7 x 18.6 x 10.9) |
| Shipping Weight                 | kg (lb) | 34 (75)                               |
| Connector type                  |         | 6 x 4.3-10 female/bottom              |
| Radome Material / Color         |         | Fiberglass / Light Gray               |

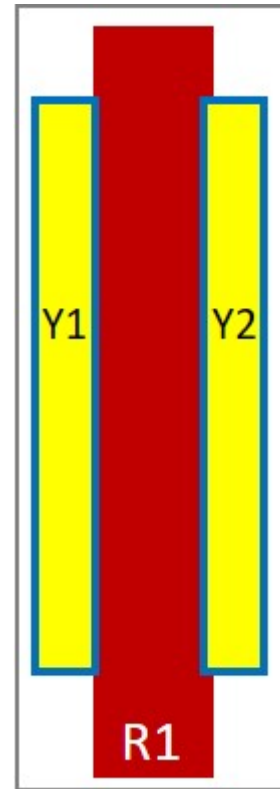
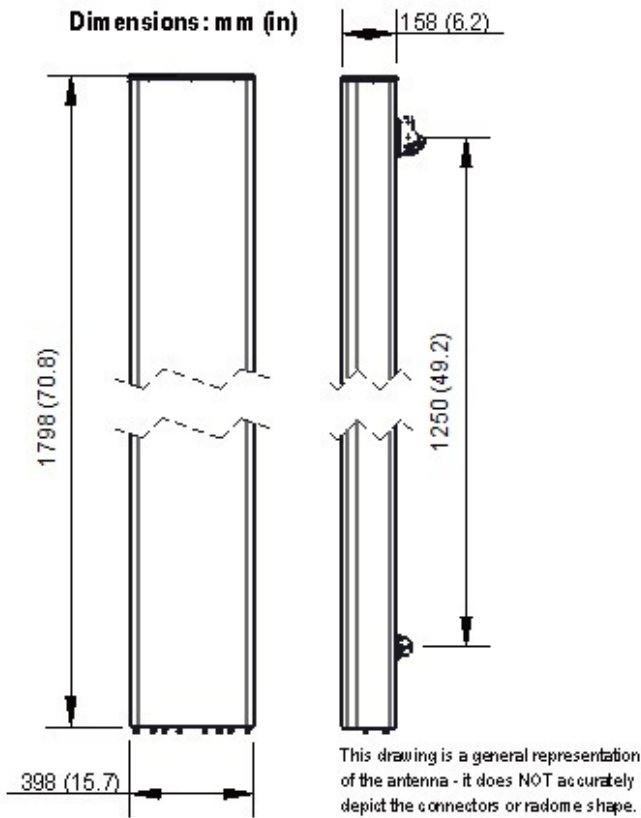
**TESTING AND ENVIRONMENTAL**

|                              |         |                         |
|------------------------------|---------|-------------------------|
| Temperature Range            | °C (°F) | -40 to 60 (-40 to 140 ) |
| Lightning protection         |         | DC Ground               |
| Survival/Rated Wind Velocity | km/h    | 200 (150 )              |
| Wind Load @Rated Wind Front  | N       | 625                     |
| Wind Load @Rated Wind Side   | N       | 320                     |
| Wind Load @Rated Wind Rear   | N       | 700                     |

**ORDERING INFORMATION**

| Order No.        | Configuration               | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|------------------|-----------------------------|-------------------|------------------------|-----------------|
| APXVBLL18B2_43-C | Internal RET (ACU-I20-H12B) | APM50-H1          | 50-125 mm              | 34.0 Kg         |





**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](#)