



**APXVBBL20H\_43-C-I20**

6-Ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/1x 1695-2690MHz, 65deg, Integrated RET

**FEATURES / BENEFITS**

- 4 ports / 2 cross pol systems in low band (690-960 MHz)
- 2 ports / 1 cross pol system in very wide high band (1695-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW Version -HRLS170901H1.00
- Compliant with AISG V2.0 and 3GPP



**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                                | 16.3         | 16.4         |
| Gain Over all Tilts                            | dBi  | 15.3 +/- 0.7                      | 15.9 +/- 0.4 | 16.1 +/- 0.3 |
| Azimuth Beamwidth 3dB                          | Deg  | 66.3 +/- 7                        | 62.2 +/- 4.2 | 60.5 +/- 7.5 |
| Elevation Beamwidth 3dB                        | Deg  | 11.6 +/- 1.1                      | 10.4 +/- 0.6 | 9.6 +/- 0.5  |
| Cross Polar Discrimination at Boresight        | dB   | 17.9                              | 23           | 23.7         |
| Cross Polar Discrimination over Sector         | dB   | 9.9                               | 10.4         | 9.7          |
| F/B at +/-30deg Total Power                    | dB   | 20.6                              | 23.7         | 23.9         |
| First Upper Side Lobe Suppression              | dB   | 18.4                              | 19.2         | 20.8         |
| Electrical Downtilt                            | Deg  | 2 to 12                           |              |              |
| Cross Polar Isolation                          | dB   | 25                                |              |              |
| Interband Isolation                            | dB   | 25                                |              |              |
| VSWR   | -    | 1.5                               |              |              |
| Passive Intermodulation (3rd Order, 2 x 43dBm) | dBc  | -153                              |              |              |
| Maximum Effective Power per Port               | Watt | 250                               |              |              |



**ELECTRICAL SPECIFICATIONS**

| Electrical Specification Header                |      | LOW BAND ARRAY (690-960 MHz) [R2] |              |             |
|--|------|-----------------------------------|--------------|-------------|
| Frequency Band                                 | MHz  | 690 - 806                         | 790 - 894    | 880 - 960   |
| Gain Typical                                   | dBi  | 15.8                              | 16.2         | 16.3        |
| Gain Over all Tilts                            | dBi  | 15.3 +/- 0.5                      | 15.8 +/- 0.4 | 16 +/- 0.3  |
| Azimuth Beamwidth 3dB                          | Deg  | 68.1 +/- 7.4                      | 63.7 +/- 3.9 | 63 +/- 7.6  |
| Elevation Beamwidth 3dB                        | Deg  | 11.5 +/- 0.9                      | 10.4 +/- 0.6 | 9.5 +/- 0.5 |
| Cross Polar Discrimination at Boresight        | dB   | 18.1                              | 22           | 25.5        |
| Cross Polar Discrimination over Sector         | dB   | 9.5                               | 11.4         | 10.3        |
| F/B at +/-30deg Total Power                    | dB   | 20.1                              | 23.5         | 23.4        |
| First Upper Side Lobe Suppression              | dB   | 18.8                              | 18.2         | 20.4        |
| Electrical Downtilt                            | Deg  | 2 to 12                           |              |             |
| Cross Polar Isolation                          | dB   | 25                                |              |             |
| Interband Isolation                            | dB   | 25                                |              |             |
| 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  | 16.6                                 | 17.2         | 18.1          | 18.2         | 18.5         |
| Gain Over all Tilts                            | dBi  | 16.2 +/- 0.4                         | 16.7 +/- 0.5 | 17.3 +/- 0.8  | 17.7 +/- 0.5 | 17.7 +/- 0.8 |
| Azimuth Beamwidth 3dB                          | Deg  | 72.5 +/- 4.1                         | 66.8 +/- 7.2 | 59.4 +/- 11.8 | 59.5 +/- 5.5 | 65.5 +/- 3.2 |
| Elevation Beamwidth 3dB                        | Deg  | 6.7 +/- 0.5                          | 6.1 +/- 0.4  | 5.8 +/- 0.4   | 5 +/- 0.2    | 4.7 +/- 0.4  |
| Cross Polar Discrimination at Boresight        | dB   | 20.7                                 | 19           | 19.6          | 18.3         | 14.7         |
| Cross Polar Discrimination over Sector         | dB   | 14                                   | 13.2         | 11.2          | 5.6          | 0.7          |
| F/B at +/-30deg Total Power                    | dB   | 25.9                                 | 28.7         | 28.7          | 28.4         | 26.5         |
| First Upper Side Lobe Suppression              | dB   | 13                                   | 14           | 13.9          | 12           | 13.7         |
| Electrical Downtilt                            | Deg  | 2 to 12                              |              |               |              |              |
| Cross Polar Isolation                          | dB   | 26                                   |              |               |              |              |
| Interband Isolation                            | dB   | 28                                   |              |               |              |              |
| VSWR   | -    | 1.5                                  |              |               |              |              |
| Passive Intermodulation (3rd Order, 2 x 43dBm) | dBc  | -153                                 |              |               |              |              |
| Maximum Effective Power per Port               | Watt | 200                                  |              |               |              |              |



**ELECTRICAL SPECIFICATIONS**

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

**MECHANICAL SPECIFICATIONS**

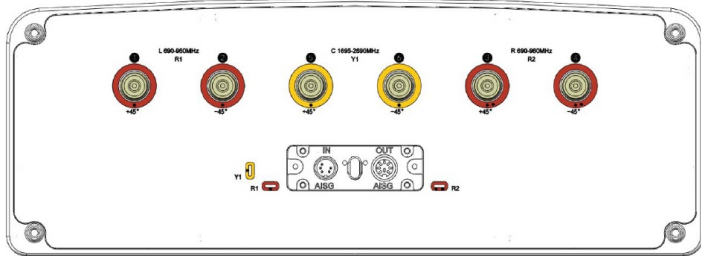
|                                 |         |   |
|---------------------------------|---------|---|
| Dimensions - H x W x D          | mm (in) | 1998 x 468 x 168 (78.7 x 18.4 x 6.6)                            |
| Weight (Antenna Only)           | kg (lb) | 25.5 (56.2)   |
| Weight (Mounting Hardware only) | kg (lb) | 5.5 (12.1)  |
| Packing size- HxWxD             | mm (in) | 2198 x 563 x 288 (86.5 x 22.2 x 11.3)                           |
| Shipping Weight                 | kg (lb) | 34 (75)   |
| Connector type                  |         | 6 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female) |
| Radome Material / Color         |         | Fiber Glass / Light Grey RAL7035                                |

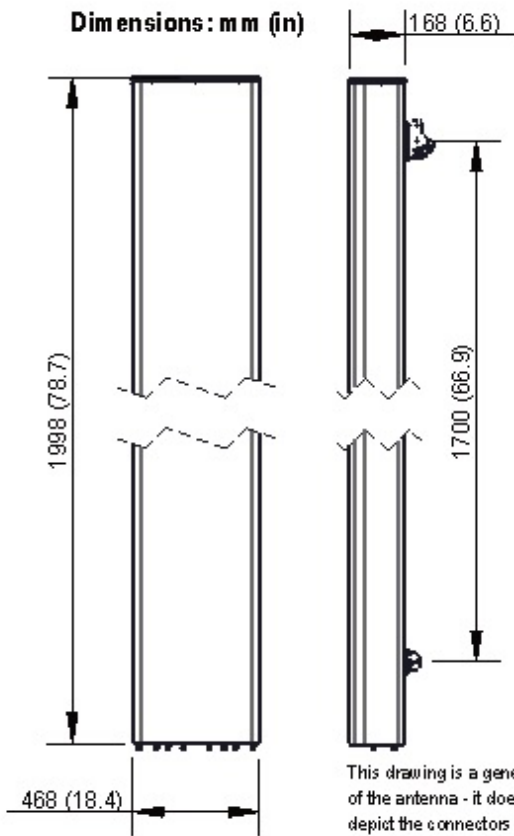
**TESTING AND ENVIRONMENTAL**

|                              |         |                         |
|------------------------------|---------|-------------------------|
| 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       | 860                     |
| Wind Load @Rated Wind Side   | N       | 320                     |
| Wind Load @Rated Wind Rear   | N       | 960                     |

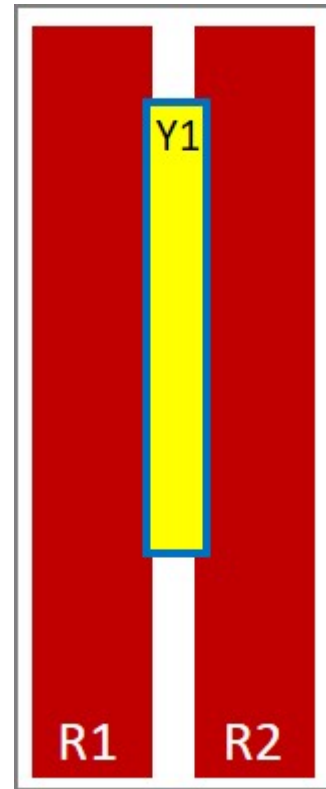
**ORDERING INFORMATION**

| Order No.           | Configuration               | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|---------------------|-----------------------------|-------------------|------------------------|-----------------|
| APXVBBL20H_43-C-I20 | Internal RET (ACU-I20-H12B) | APM50-H2          | 50-125mm               | 34.0 Kg         |





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



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](#)