

## 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 -HRLS200608H1.00
- 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  | 16.8                              | 17.1         | 17.2         |
| Gain Over all Tilts                            | dBi  | 16 +/- 0.8                        | 16.6 +/- 0.5 | 16.8 +/- 0.4 |
| Azimuth Beamwidth 3dB                          | Deg  | 67.3 +/- 5.7                      | 62.6 +/- 2.7 | 61.1 +/- 4.7 |
| Elevation Beamwidth 3dB                        | Deg  | 8.8 +/- 0.5                       | 8.1 +/- 0.4  | 7.3 +/- 0.5  |
| Cross Polar Discrimination at Boresight        | dB   | 19.9                              | 23.9         | 23.3         |
| Cross Polar Discrimination over Sector         | dB   | 11.3                              | 10.7         | 10.2         |
| F/B at +/-30deg Total Power                    | dB   | 21.3                              | 23.2         | 24.4         |
| First Upper Side Lobe Suppression              | dB   | 15.1                              | 16.9         | 19.2         |
| 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 | 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  | 16.5                              | 17           | 17.2         |
| Gain Over all Tilts                            | dBi  | 15.8 +/- 0.7                      | 16.7 +/- 0.3 | 16.9 +/- 0.3 |
| Azimuth Beamwidth 3dB                          | Deg  | 67.7 +/- 7.2                      | 62.2 +/- 2.5 | 60.9 +/- 4.5 |
| Elevation Beamwidth 3dB                        | Deg  | 8.8 +/- 0.6                       | 8.1 +/- 0.3  | 7.3 +/- 0.5  |
| Cross Polar Discrimination at Boresight        | dB   | 19.5                              | 22.8         | 25           |
| Cross Polar Discrimination over Sector         | dB   | 9.8                               | 11.2         | 9.9          |
| F/B at +/-30deg Total Power                    | dB   | 20.2                              | 23.2         | 24.2         |
| First Upper Side Lobe Suppression              | dB   | 15                                | 16.2         | 18           |
| 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 | 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                                 | 17.1         | 18           | 18           | 18.2         |
| Gain Over all Tilts                            | dBi  | 16.2 +/- 0.4                         | 16.7 +/- 0.4 | 17.3 +/- 0.7 | 17.4 +/- 0.6 | 17.3 +/- 0.9 |
| Azimuth Beamwidth 3dB                          | Deg  | 64 +/- 6.6                           | 64 +/- 5.4   | 57.6 +/- 9   | 59.2 +/- 5.4 | 64.2 +/- 2.9 |
| Elevation Beamwidth 3dB                        | Deg  | 6.7 +/- 0.4                          | 6.2 +/- 0.4  | 5.9 +/- 0.4  | 5 +/- 0.3    | 4.7 +/- 0.4  |
| Cross Polar Discrimination at Boresight        | dB   | 21.4                                 | 20.6         | 22.1         | 18.2         | 13.2         |
| Cross Polar Discrimination over Sector         | dB   | 13                                   | 12.3         | 9.1          | 5            | 0.5          |
| F/B at +/-30deg Total Power                    | dB   | 25.5                                 | 26.4         | 28           | 28.4         | 25.9         |
| First Upper Side Lobe Suppression              | dB   | 14.2                                 | 16           | 15.4         | 13           | 16.1         |
| 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

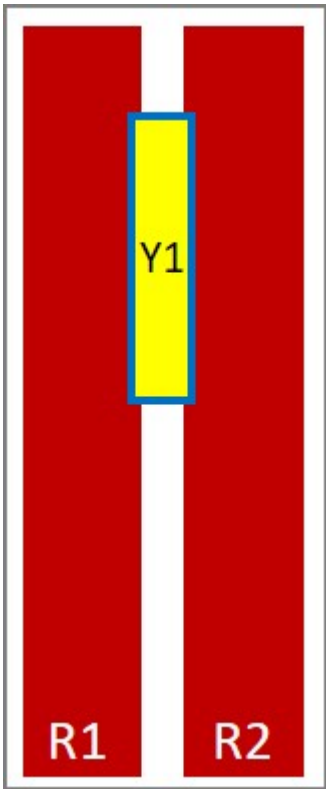
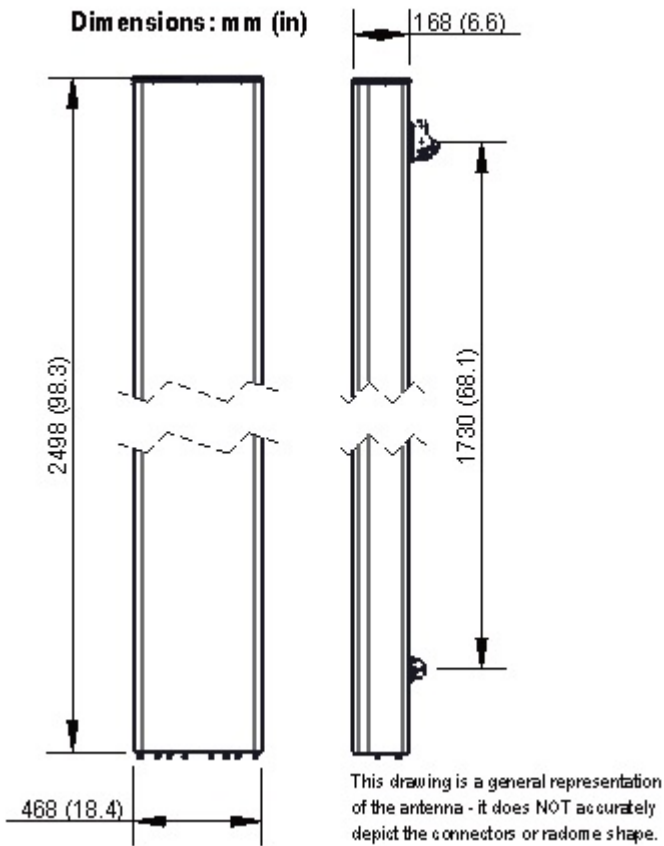
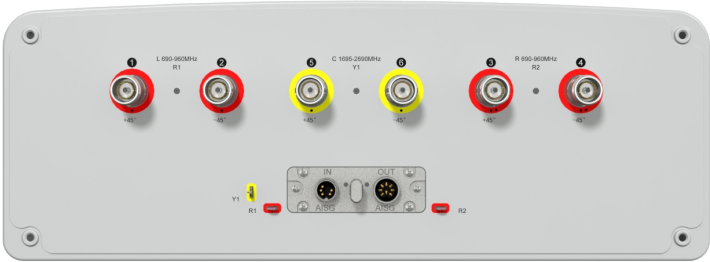
|                                 |         |                                                                 |
|---------------------------------|---------|-----------------------------------------------------------------|
| Dimensions - H x W x D          | mm (in) | 2498 x 468 x 168 (98.3 x 18.4 x 6.6)                            |
| Weight (Antenna Only)           | kg (lb) | 33.4 (73.6)                                                     |
| Weight (Mounting Hardware only) | kg (lb) | 9 (19.8)                                                        |
| Packing size- HxWxD             | mm (in) | 2698 x 544 x 293 (106.2 x 21.4 x 11.5)                          |
| Shipping Weight                 | kg (lb) | 47.5 (104.7)                                                    |
| 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       | 1080                    |
| Wind Load @Rated Wind Side   | N       | 475                     |
| Wind Load @Rated Wind Rear   | N       | 1205                    |

ORDERING INFORMATION

| Order No.           | Configuration              | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|---------------------|----------------------------|-------------------|------------------------|-----------------|
| APXVBBL26H_43-C-I20 | Internal RET(ACU-I20-H12I) | APM50-HS          | 50-125mm               | 47.5 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](#)