

APXVL20B_43-C-I20

Features

- 2 ports / 1 cross pol system in high band (1710-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version -2.02
- Compliant with AISG v2.0 and 3GPP



| | | |
|------------------|-------------------------|---|
| PRODUCT OVERVIEW | Frequency Range (MHz) | 1710-2690 |
| | Array | ■ Y1 |
| | Connector | 1-2 |
| | | 2 PORTS |
| | Polarization | XPOL |
| | Azimuth Beamwidth (avg) | 65° |
| | Electrical Downtilt | 0-6° |
| | Dimensions | 2080 x 160 x 115 mm (81.9 x 6.3 x 4.5 in) |

ORDERING OPTIONS Select from the following ordering options

| ANTENNA MODEL NUMBER | CONFIGURATION | MOUNTING HARDWARE | MOUNTING PIPE DIAMETER | SHIPPING WEIGHT |
|----------------------|-------------------------------------|------------------------------------|------------------------|--------------------|
| APXVL20B_43-C-I20 | ACU-I20-B1 Internal RET Included | APM50-B3 Beam Tilt Kit Included | 60-110 mm (2.4-4.3 in) | 19.0 kg (41.9 lbs) |



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ELECTRICAL SPECIFICATIONS

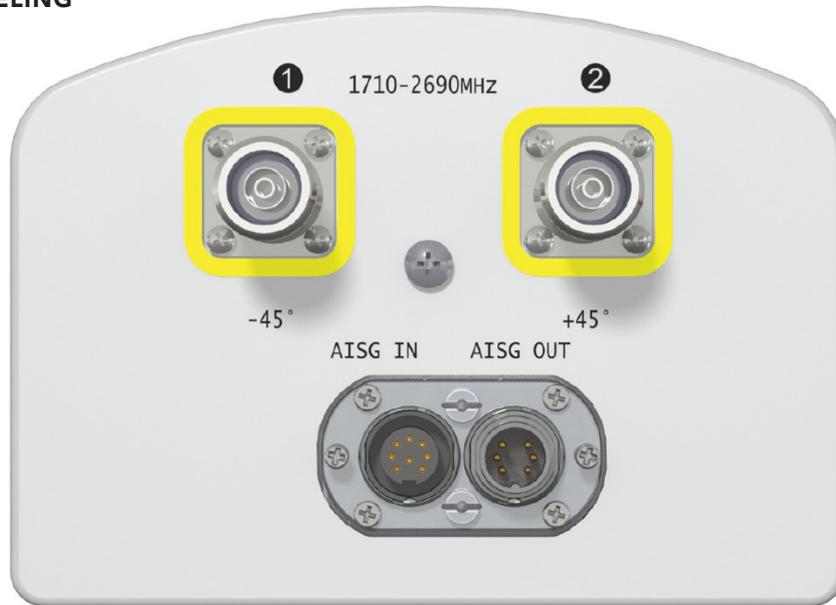
■ Y1

| | | | | | | | |
|--|----------------|---------|----------------|--------------|--------------|--------------|--------------|
| Frequency Range | | MHz | 1710-2690 | | | | |
| | | MHz | 1710-1880 | 1850-1990 | 1920-2170 | 2300-2400 | 2500-2690 |
| Polarization | | --- | ±45° | | | | |
| Gain | Over all Tilts | dBi | 17.9 ± 0.5 | 18.4 ± 0.2 | 18.6 ± 0.3 | 19.0 ± 0.3 | 19.0 ± 0.4 |
| | Max Gain | dBi | 18.4 | 18.6 | 18.9 | 19.3 | 19.4 |
| Azimuth Beamwidth (3 dB) | | degrees | 72.7° ± 3.0° | 70.4° ± 2.0° | 68.7° ± 2.4° | 63.8° ± 2.8° | 58.9° ± 1.7° |
| Elevation Beamwidth (3 dB) | | degrees | 4.9° ± 0.2° | 4.5° ± 0.2° | 4.2° ± 0.3° | 3.8° ± 0.2° | 3.6° ± 0.2° |
| Electrical Downtilt | | degrees | 0-6° | | | | |
| Impedance | | Ohms | 50Ω | | | | |
| VSWR (Return Loss) | | --- | 1.5:1 (-14 dB) | | | | |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBc | -150 | | | | |
| Front-to-Back Ratio, Total Power, ± 30° | | dB | 24.1 | 24.9 | 24.9 | 25.7 | 23.9 |
| First Upper Side Lobe Suppression | | dB | 21.9 | 19.7 | 19.8 | 21.2 | 17.7 |
| Cross Polar Discrimination Over Sector | | dB | 16.6 | 16.7 | 14.7 | 11.0 | 10.0 |
| Cross Polar Discrimination (XPD) at Mechanical Boresight (0°) | | dB | 17.5 | 19.1 | 18.9 | 18.1 | 23.8 |
| Maximum Effective Power Per Port | | Watts | 250 W | | | | |
| Cross Polar Isolation | | dB | 28 | | | | |

Specifications follow BASTA guidelines.

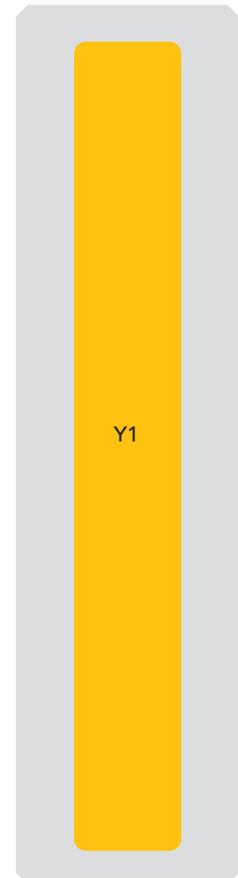
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

| ARRAY | FREQUENCY | CONNECTOR | CONNECTOR TYPE | RET | AISG RET UID |
|-------|---------------|-----------|--------------------|-----|-----------------|
| ■ Y1 | 1710-2690 MHz | 1-2 | (2x) 4.3-10 Female | Y1 | RFxxxxxxxxxx-Y1 |



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

| | | |
|--|---------------------------------------|---|
| Length | mm (in) | 2080 (81.9) |
| Width | mm (in) | 160 (6.3) |
| Depth | mm (in) | 115 (4.5) |
| Net Weight - Antenna Only | kg (lbs) | 11.5 (25.4) |
| Net Weight - Mounting Hardware Only | kg (lbs) | 2.7 (6.0) |
| Wind Load Rated at 150 km/h (93 mph) | Front | N (lbf) 410 (92) |
| | Side | N (lbf) 200 (45) |
| | Rear | N (lbf) 680 (153) |
| Survival Wind Speed / Rated Wind Speed | km/h (mph) | 200 (150) |
| Connector Type | -- | (2x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom |
| Radome Color | --- | Light Grey RAL7035 |
| Radome Material | --- | Fiberglass |
| Lightning Protection | --- | Direct Ground |
| Shipping | Packing Size (Length x Width x Depth) | mm (in) 2320 x 285 x 240 (91.3 x 11.2 x 9.4) |
| | Shipping Weight | kg (lbs) 19 (41.9) |

ENVIRONMENTAL SPECIFICATIONS

| | | |
|----------------------------------|---------|----------------------------------|
| Environmental Standard | --- | ETS 300 019 |
| Operating Temperature | degrees | -40° to +60° C (-40° to +140° F) |
| Product Environmental Compliance | --- | Product is RoHS Compliant |

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ACCESSORIES Accessories may be ordered separately unless otherwise indicated.

| ITEM | MODEL NUMBER | WEIGHT |
|--|--------------|----------------|
| Beam Tilt Mounting Bracket Kit for Pole Diameter 60-110 mm (2.4-4.3 in) <i>Shipped with antenna</i> | APM50-B3 | 2.7 kg (6 lbs) |

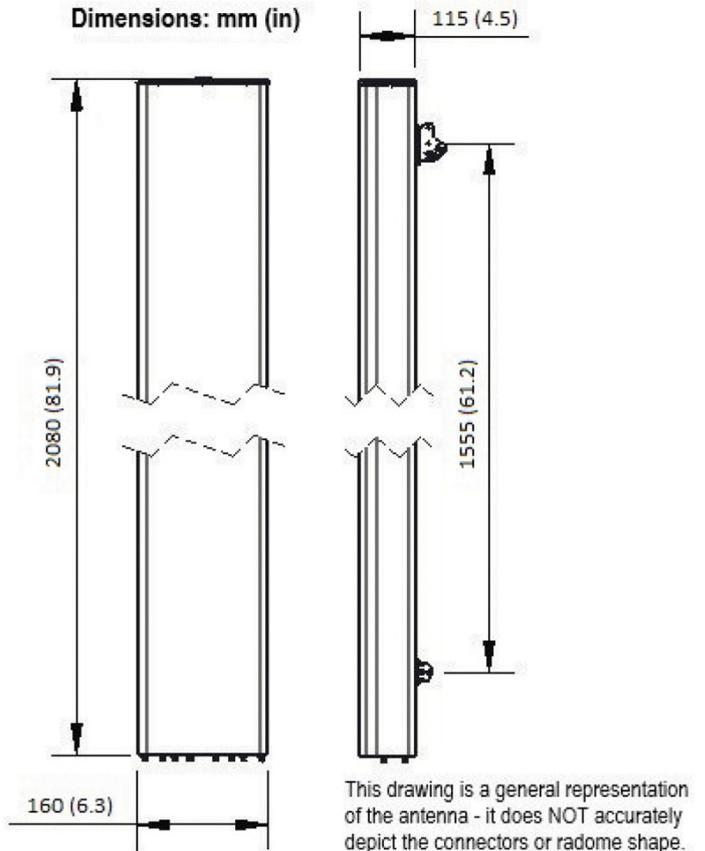
INSTALLATION Please read all installation notes before installing product.



- Always attach the antenna using all mounting points.
- Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)