



FEATURES / BENEFITS

This antenna provides a 4 Port multi-band flexible platform for use in deployment scenarios encompassing 600, 700, 800 applications.

- 24 Inch Width For Easier Zoning
- Superior elevation pattern performance across the entire electrical down tilt range
- Low band arrays driven by a single RET motor
- ACU-A20-SR Field Replaceable (Integrated) AISG RET motor



Technical features

ELECTRICAL SPECIFICATIONS

| Electrical Specification Header | | Low Band Arrays (617-894 MHz) Ports 1-4 | | | |
|---------------------------------|------|---|------------|------------|------------|
| Frequency Band | MHz | 617-698 | 698-746 | 746-806 | 806-894 |
| Gain | dBi | 15.9 | 16.2 | 16.2 | 16.3 |
| Azimuth Beamwidth 3dB | Deg | 67 +/-3 | 63+/-4 | 62+/-3 | 62+/-2 |
| Elevation Beamwidth 3dB | Deg | 10.1+/-0.5 | 9.2+/-0.4 | 8.5+/-0.3 | 7.9+/-0.4 |
| Cross-Pol at Boresight | dB | 17 | 18 | 19 | 20 |
| F/B at 180 Copolar | dB | 28 | 29 | 32 | 34 |
| Electrical Downtilt | Deg | 2 to 12 | 2 to 12 | 2 to 12 | 2 to 12 |
| First Upper Side Lobe | dB | 19 | 19 | 18 | 17 |
| VSWR | - | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 |
| Return Loss | dB | -14 | -14 | -14 | -14 |
| Cross Polar Isolation | dB | 25 | 25 | 25 | 25 |
| 3rd Order PIM 2 x 43dBm | dBc | -153 | -153 | -153 | -153 |
| Maximum CW Power per Port | Watt | 400 | 400 | 400 | 400 |
| Gain Over All Tilts | dBi | 15.4+/-0.5 | 15.7+/-0.5 | 15.6+/-0.6 | 15.9+/-0.5 |
| Cross-Pol over Sector | dB | 8 | 6 | 5 | 6 |
| F/B at +/-30 Total Power | dB | 19 | 19 | 20 | 22 |
| Upper Side Lobe Peak to +20 | dB | 18 | 18 | 18 | 17 |

ELECTRICAL SPECIFICATIONS

| | | |
|--------------|-----|--------|
| Impedance | Ohm | 50 |
| Polarization | Deg | +/- 45 |

MECHANICAL SPECIFICATIONS

| | | |
|---------------------------------|---------|--|
| Dimensions - H x W x D | mm (in) | 2436 x 609 x 215 (95.9 x 24 x 8.5) |
| Weight (Antenna Only) | kg (lb) | 43.7 (96.3) |
| Weight (Mounting Hardware only) | kg (lb) | 12.3 (27.1) |
| Packing size- HxWxD | mm (in) | 2565 x 735 x 390 (101 x 28.9 x 15.4) |
| Shipping Weight | kg (lb) | 65.9 (145.3) |
| Connector type | | 4 x 4.3-10 female at bottom + 2 AISG connectors (1 male, 1 female) |
| Radome Material / Color | | Fiber Glass / Light Grey RAL7035 |



TESTING AND ENVIRONMENTAL

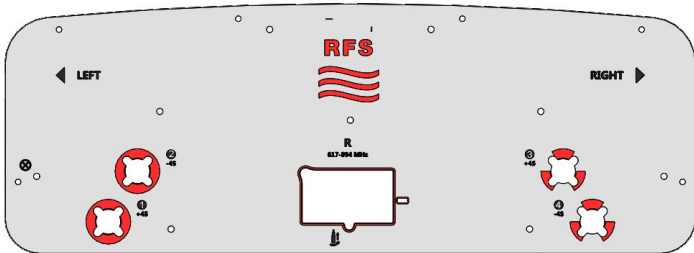
| | | |
|------------------------------|---------|-------------------------|
| Temperature Range | °C (°F) | -40 to 60 (-40 to 140) |
| Lightning protection | | DC Grounded |
| Survival/Rated Wind Velocity | km/h | 240 (150) |
| Wind Load @Rated Wind Front | N | 1428 |
| Wind Load @Rated Wind Side | N | 434 |
| Wind Load @Rated Wind Rear | N | 1544 |

ORDERING INFORMATION

| Order No. | Configuration | Mounting Hardware | Mounting pipe Diameter | Shipping Weight |
|---------------------|---|-----------------------------------|------------------------|-----------------|
| APXVAA24X_43-U-NA20 | ACU-A20-SR Field Replace RET included (1) | APM40-5E Beam tilt kit (included) | 60-120mm | 65.9 Kg |

| Port | Array | Frequency | RET | AISG RET UID |
|------|-------|-----------|-----|-------------------|
| 1 | R1 | 617-894 | R1 | RFxxxxxxxxxxx-2R1 |
| 2 | | 617-894 | | |
| 3 | R2 | 617-894 | | |
| 4 | | 617-894 | | |

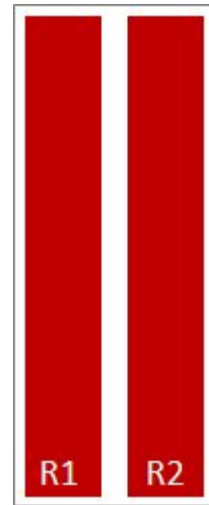
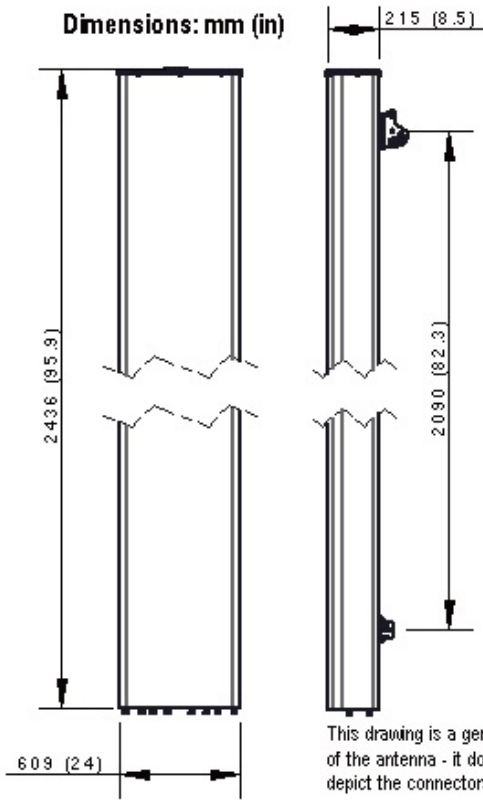
| RET Information | |
|-------------------|---------------|
| Frequency | 617-894 |
| Model | ACU-A20-SR |
| Location | Semi-internal |
| Field Replaceable | Yes |
| Quantity | 1 |
| RET ID | R1 |





APXVAA24X_43-U-A20

Dual Slant Polarized Dual Band (4 Port) Antenna, x2 617-894 MHz, 65deg, 2.4m (8ft), RET, 2-12°



External Document Links

[APM40_Series_Installation_Instructions](#)

[Manual Overdrive 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](#)