



This X-Polarized variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range. This antenna is optimized for performance across the entire frequency band (1710-2170 MHz).

FEATURES / BENEFITS

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (Typically <-20dB).
- Optional remote tilt - can be retrofitted.
- Two X-Polarized panels in a single radome.
- Dual polarization.
- Low profile for low visual impact.
- Broadband design.



Technical features

ELECTRICAL SPECIFICATIONS

| Frequency Range | MHz | 1710-1900 | 1900-2170 |
|--------------------------------|-----------|--|-----------|
| Gain | dBi (dBd) | 16.5 (14.4) | |
| Horizontal Beamwidth | deg | 88 | |
| Vertical Beamwidth | deg | 7.0 | 6.4 |
| Electrical Downtilt Range | deg | 0-10 | |
| 1st Upper Sidelobe Suppression | dB | >17 all other (typically >20) | |
| Upper Sidelobe Suppression | dB | >17 all other (typically >20) | |
| Front-To-Back Ratio | dB | >26 | |
| Polarization | | Dual pol +/-45° | |
| VSWR | | < 1.5:1 | |
| Isolation between Ports | dB | >30 | |
| 3rd Order IMP @ 2 x 43 dBm | dBc | ≥153 | |
| 7th Order IMP @ 2x46 dBm | dBc | N/A, >170 | |
| Impedance | Ohms | 50 | |
| Maximum Power Input | W | 300 | |
| Beamwidth Approximate | deg | 90 | |
| Frequency/Operating Band | | 3G/UMTS (Single, Broad, Dual and Triple-Band) AWS Band (1710-1755, 2110-2155 MHz) | |
| Antenna Type | | Dual Polarized | |
| Electrical Down Tilt Option | | Variable | |



MECHANICAL SPECIFICATIONS

| | | |
|-------------------------------|------------|--------------------------------------|
| Lightning Protection | | Direct Ground |
| Connector Type/Location | | (2) 7-16 Long Neck Female/Bottom |
| Dimensions - HxWxD | mm (in) | 1349 x 169 x 80 (53.0 x 6.65 x 3.15) |
| Weight w/o Mtg Hardware | kg (lb) | 8.5 (18.7) |
| Weight w/ Mtg Hardware | kg (lb) | 11.3 (24.9) |
| Survival/Rated Wind Speed | km/h (mph) | 200 (125) / 160 (100) |
| Wind Load @ Rated Wind, Front | N (lbf) | 406 (91) |
| Wind Load @ Rated Wind, Max. | N (lbf) | 406 (91) |
| Wind Load @ Rated Wind, Side | N (lbf) | 236 (53) |
| Wind Load @ Rated Wind, Rear | N (lbf) | 196 (44) |
| Mount Type | | Downtilt |
| Height (Approximate) | ft. | 4.5 |

TESTING AND ENVIRONMENTAL

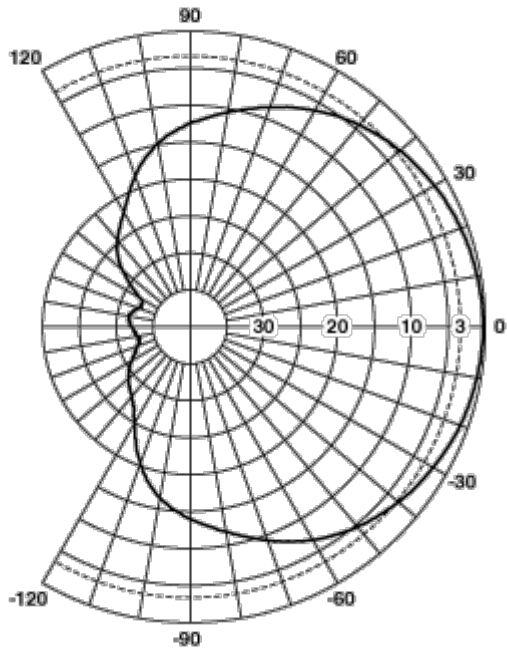
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|-----------------------|---------|-------------------------|
| Operation temperature | °C (°F) | -40 to 60 (-40 to 140) |
|-----------------------|---------|-------------------------|

MATERIAL

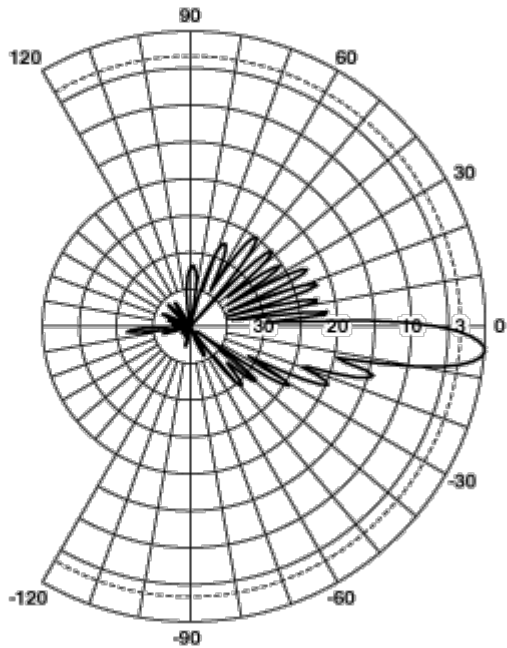
| | | |
|----------------------------|--|-------------------------------|
| Radome Material/Color | | Fiberglass/Light Grey RAL7035 |
| Mounting Hardware Material | | APM40-2 |
| Radiating Element Material | | Brass |
| Reflector Material | | Aluminum |

ORDERING INFORMATION

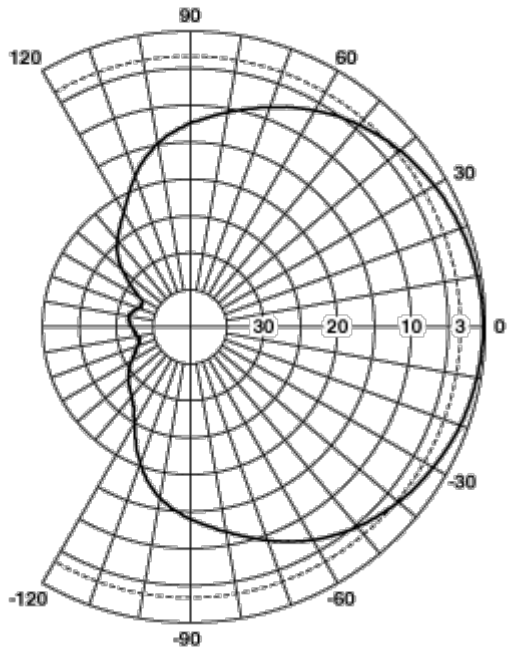
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|---------------------------|---------|--------------------------------------|
| Shipping Weight | kg (lb) | 15.5 (34.1) |
| Packing Dimensions, HxWxD | mm (in) | 1520 x 260 x 200 (59.8 x 10.2 x 7.8) |
| Mounting Hardware | | APM40-2 |
| Mounting Pipe Diameter | mm (in) | 60 - 120 (2.36 - 4.72) |
| Mounting Hardware Weight | kg (lb) | 3.4 (7.5) |



Horizontal Pattern



Vertical Pattern



Horizontal Pattern

External Document Links

[APM40 Series Datasheet](#)

[APM40 Series Installation Instructions](#)

Notes

For additional mounting information please click "External Document Link" below.