

2-Port Panel Antenna

1695-2200 MHz

OPTIMIZER ®

65°

1349 mm VARI.

VARIABLE TILT

APXV18-206516S-C-A20

Features

This x-polarized variable tilt antenna provides exceptional supression 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 (1710-2200 MHz).

- Variable electrical downtilt provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10°.
- High suppression of all upper sidelobes (typically < -18dB)
- Gain tracking difference between (1695-1755 MHz) and (2110-2200 MHz) < 1dB
- Azimuth beamwidth difference between (1695-1755 MHz) and (2110-2200 MHz) $< 5^{\circ}$
- Low profile for low visual impact
- Dual polarization; broadband design
- Motor pre-installed

| | Frequency Range (MHz) | 1695-2200 | |
|----------|-------------------------|------------------------------------------|--|
| EW | Connector | 2 PORTS | |
| OVERVIEW | Polarization | Dual Pol ±45° | |
| _ | Azimuth Beamwidth (avg) | 65° | |
| PRODUCT | Gain | 18.4 dBi | |
| PRC | Electrical Downtilt | Variable 0-10° | |
| | Dimensions | 1349 x 169 x 80 mm (53.0 x 6.7 x 3.2 in) | |

ORDERING OPTIONS Select from the following ordering options

| ANTENNA MODEL NUMBER | CONFIGURATION | MOUNTING HARDWARE | MOUNTING PIPE DIAMETER | SHIPPING WEIGHT |
|----------------------|------------------------------------------------|-----------------------------------|------------------------|-----------------|
| APXV18-206516S-C-A20 | ACU-A20-S Field Replaceable RET Included | APM40-2 Beam Tilt Kit Included | 60-120 mm (2.4-4.7 in) | 15 kg (33 lbs) |





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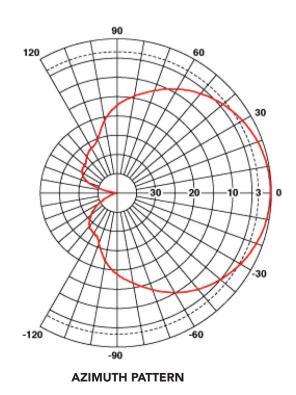
65°

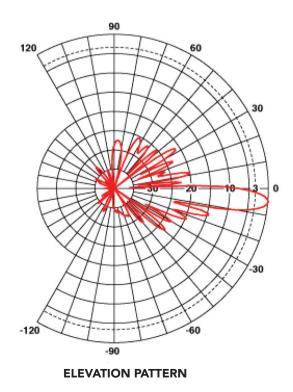
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ELECTRICAL SPECIFICATIONS

| Frequency Range | MHz | 1695-2200 |
|----------------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| Polarization | | ±45° |
| Gain | dBi | 18.4 |
| Beamwidth Approximate | degrees | 65° |
| Azimuth Beamwidth (3 dB) | degrees | 65° |
| Elevation Beamwidth (3 dB) | degrees | 5.9° to 7.7° |
| Electrical Downtilt | degrees | Variable 0-10° |
| Impedance | Ohms | 50Ω |
| VSWR | | < 1.4:1 |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | dBc | > 150, (155 Typical) |
| Front-to-Back Ratio | dB | > 26 (Typically 28) |
| Upper Side Lobe Suppression | dB | > 18 All |
| First Upper Side Lobe Suppression | dB | > 18 All |
| Maximum Effective Power Per Port | Watts | 300 W |
| Isolation Between Ports | dB | > 30 |
| Operating Band | | 3G/UMTS (Single, Broad, Dual and Triple-Band) AWS Band (1695-1755, 2110-2200 MHz) |







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MECHANICAL SPECIFICATIONS

| Shipping | Shipping Weight | | kg (lbs) | 15 (33) | |
|----------------------------------------|---------------------------------------|------------|-----------------------|--------------------------------------|--|
| Shinning | Packing Size (Length x Width x Depth) | | mm (in) | 1450 x 230 x 189 (57.1 x 9.0 x 7.4) | |
| Lightning Protection | | | | Direct Ground | |
| Reflector Material | | | | Aluminum | |
| Radome Material | | | | Fiberglass | |
| Radome Color | | | | Light Grey RAL7035 | |
| Connector Type | | | | (2x) 7-16 Long Neck Female at Bottom | |
| Survival Wind Speed / Rated Wind Speed | | km/h (mph) | 200 (125) / 160 (100) | | |
| | 1 . | Maximum | N (lbf) | 406 (91) | |
| Rated at 160 km/h (1 | 00 mph) | Rear | N (lbf) | 196 (44) | |
| Wind Load | | Side | N (lbf) | 236 (53) | |
| | Front | | N (lbf) | 406 (91) | |
| Net Weight - Mounting Hardware Only | | kg (lbs) | 3.4 (7.5) | | |
| Net Weight - Antenna Only | | | kg (lbs) | 9 (19.6) | |
| Depth | | | mm (in) | 80 (3.2) | |
| Width | | | mm (in) | 169 (6.7) | |
| Length | | | mm (in) | 1349 (53.0) | |

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 60-120 mm (2.4-4.7 in) Shipped with antenna | APM40-2 | 3.4 kg (7.5 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

APM40 Mounting Kit Series Installation Instructions

NOTES

For additional mounting information, please check External Document Links.

For Radiating Patterns: Request pattern files