

OPTIMIZER ®

65°

1953 mm

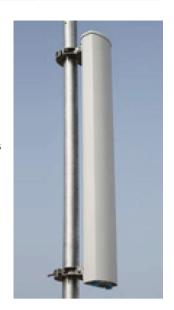
VARIABLE TILT

APXV18-206517S-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 AWS frequency band (1710-2155 MHz). The antenna comes pre-connected with one antenna control unit (ACU).

- Variable electrical downtilt provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10°.
- High suppression of all upper sidelobes (typically < -20dB)
- Gain tracking difference between (1695-1755 MHz) and (2110-2200 MHz) < 1dB
- Azimuth beamwidth difference between (1695-1755 MHz) and (2110-2200 MHz) < 5°
- Low profile for low visual impact
- Dual polarization; broadband design
- Includes AISG 2.0 compatible ACU-A20-S antenna control unit



EW	Frequency Range (MHz)	1695-2200			
	Connector	2 PORTS			
OVERVIEW	Polarization	Dual Pol ±45°			
	Azimuth Beamwidth (avg)	65°			
PRODUCT	Gain	18.8 dBi			
PRC	Electrical Downtilt	Variable 0-10°			
	Dimensions	1953 x 169 x 80 mm (76.0 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
APXV18-206517S-C-A20	ACU-A20-S Field Replaceable RET Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	20 kg (44 lbs)







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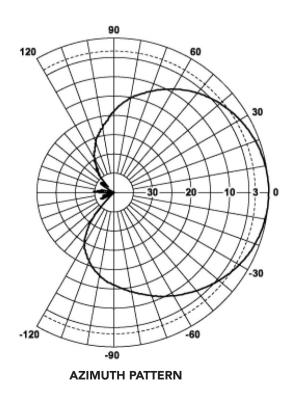
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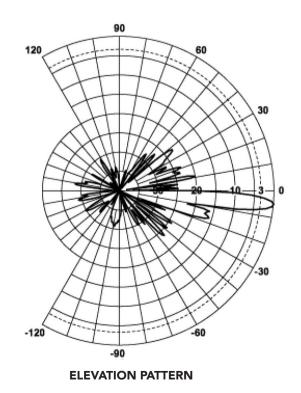
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ELECTRICAL SPECIFICATIONS

ELLOTRICAL DI LONTOATIONS		
Frequency Range	MHz	1695-2200
Polarization		±45°
Gain	dBi	18.8 average across band
Beamwidth Approximate	degrees	65°
Azimuth Beamwidth (3 dB)	degrees	65° ± 5.0° (65.1° average across band)
Elevation Beamwidth (3 dB)	degrees	4.4° to 5.5°
Electrical Downtilt	degrees	Variable 0-10°
Impedance	Ohms	50Ω
VSWR		< 1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers	dBc	> 150, (155 Typical)
Front-to-Back Ratio	dB	> 26 (Typically 29)
First Upper Side Lobe Suppression	dB	Typically > 20
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)





Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.



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MECHANICAL SPECIFICATIONS

Length			mm (in)	1953 (76.0)	
Width			mm (in)	169 (6.7)	
Depth			mm (in)	80 (3.2)	
Net Weight - Antenna Only		kg (lbs)	12 (26)		
Net Weight - Mounting Hardware Only		kg (lbs)	3.4 (7.5)		
		Front	N (lbf)	568.1 (127.7)	
Wind Load	93 mph)	Side	N (lbf)	331.5 (74.5)	
Rated at 150 km/h (9		Rear	N (lbf)	274.4 (61.7)	
(Maximum	N (lbf)	568.1 (127.7)	
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (125)		
Connector Type			(2x) 7-16 Long Neck Female at Bottom		
Radome Color				Light Grey RAL7035	
Radiating Element Material				Brass	
Reflector Material				Aluminum	
Lightning Protection			Direct Ground		
el · ·	Packing Size (Length x Width x Depth)		mm (in)	1950 x 230 x 189 (76.8 x 9.0 x 7.4)	
Snipping	Shipping Weight		kg (lbs)	20 (44)	
Radome Color Radiating Element Material Reflector Material Lightning Protection Packing Size (Length x Width x Depth)		 mm (in)	Light Grey RAL7035 Brass Aluminum Direct Ground 1950 x 230 x 189 (76.8 x 9.0 x 7.4)		

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

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