



This X-Polarized variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range. The antenna comes pre-connected with one antenna control unit (ACU). 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 2-12 deg.
- High Suppression of all Upper Sidelobes (Typically <-20dB).
- Includes (1) AISG 2.0 Compatible ACU-A20-N or ACU-A20-S antenna control unit.
- Broadband design.
- Dual polarization.
- Low profile for low visual impact.



Technical features

ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	1710-1900	1900-2170
Gain	dBi (dBd)	14.7 (12.6)	15.1 (13.0)
Horizontal Beamwidth	deg	68	63
Vertical Beamwidth	deg	15.3	13.6
Electrical Downtilt Range	deg	2-12	
1st Upper Sidelobe Suppression	dB	>18 all (Typically >20)	
Upper Sidelobe Suppression	dB	>18 all (Typically >20)	
Front-To-Back Ratio	dB	>28	
Polarization		Dual pol +/-45°	
VSWR		< 1.4:1	
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	65	
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)	700 x 169 x 80 (27.5 x 6.65 x 3.15)
Weight w/o Mtg Hardware	kg (lb)	6 (13.2)
Weight w/ Mtg Hardware	kg (lb)	8.8 (19.4)
Survival/Rated Wind Speed	km/h (mph)	200 (125) / 160 (100)
Applied Wind Load Standard		DIN 1055-4
Wind Load @ Rated Wind, Front	N (lbf)	210 (47)
Wind Load @ Rated Wind, Max.	N (lbf)	210 (47)
Wind Load @ Rated Wind, Side	N (lbf)	123 (27)
Wind Load @ Rated Wind, Rear	N (lbf)	102 (23)
Mount Type		Downtilt
Height (Approximate)	ft.	2.25

TESTING AND ENVIRONMENTAL

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

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

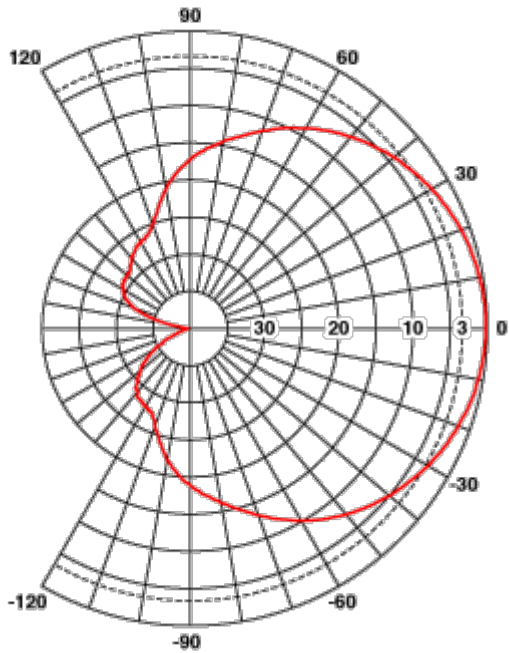
ORDERING INFORMATION

Shipping Weight	kg (lb)	12 (26.4)
Packing Dimensions, HxWxD	mm (in)	860 x 260 x 200 (33.8 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)

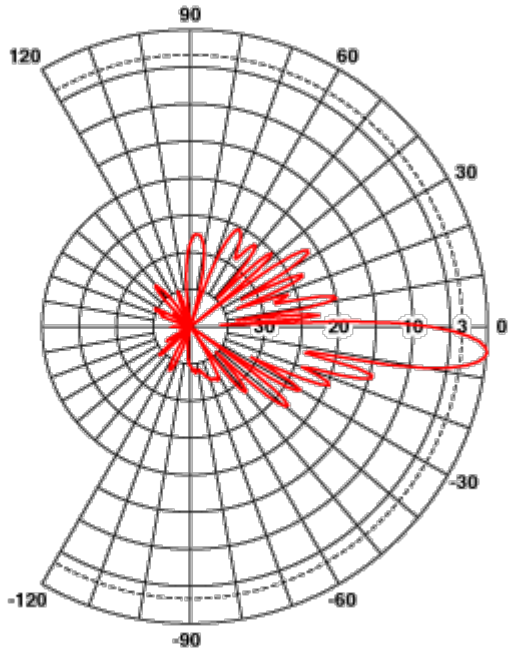


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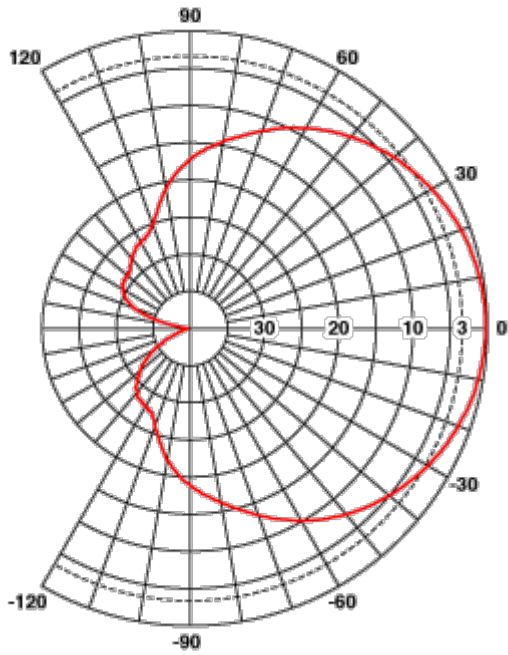
Optimizer® Dual Polarized Antenna, 1710-2170, 65deg, 15.1dBi, 0.7m, VET, 2-12deg RET



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.