



Optimizer® Dual Polarized Antenna, 1710-2170, 90deg, 17.9dBi, 1.8m, VET, 0-10deg

Product Description

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 Specifications

Electrical Specifications

Frequency Range, MHz	1710-1900	1900-2170
Horizontal Beamwidth, deg	88	
Vertical Beamwidth, deg	5.1	4.5
Electrical Downtilt Range, deg	0-10	
Gain, dBi (dBd)	17.9 (15.8)	17.7 (15.7)
1st Upper Sidelobe Suppression, dB	>18 first (typically >22)	
Upper Sidelobe Suppression, dB	>18 all (Typically >20)	
Front-To-Back Ratio, dB	>28	
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 @ 2 x 46 dBm, dBc	N/A, >170	
Impedance, Ohms	50	
Maximum Power Input, W	300	
Lightning Protection	Direct Ground	
Connector Type/Location	(2) 7-16 Long Neck Female/Bottom	

Mechanical Specifications

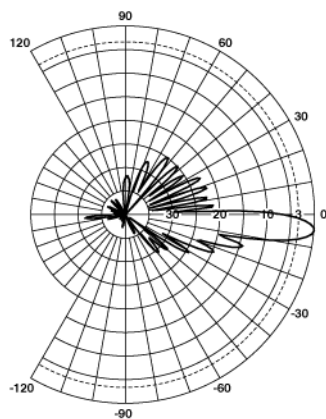
Dimensions - HxWxD, mm (in)	1850 x 169 x 80 (72.0 x 6.65 x 3.15)
Weight w/o Mtg Hardware, kg (lb)	11.5 (25.3)
Survival/Rated Wind Speed, km/h (mph)	200 (125) / 160 (100)
Wind Load @ Rated Wind, Front, N (lbf)	557 (125)
Wind Load @ Rated Wind, Max., N (lbf)	557 (125)
Wind Load @ Rated Wind, Side, N (lbf)	325 (73)
Wind Load @ Rated Wind, Rear, N (lbf)	269 (60)
Operation temperature, °C (°F)	-40 to +60 (-40 to +140)
Radome Material/Color	Fiberglass/Light Grey RAL7035
Mounting Hardware Material	Diecasted Aluminum
Radiating Element Material	Brass
Reflector Material	Aluminum
Shipping Weight, kg (lb)	17.5 (38.5)
Packing Dimensions, HxWxD, mm (in)	2020 x 260 x 200 (79.5 x 10.2 x 7.8)

Ordering Information

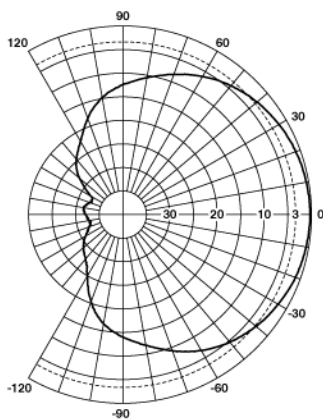
Mounting Hardware	APM40-2
Mounting Pipe Diameter, mm (in)	60-120 (2.36-4.72)
Mounting Hardware Weight, kg (lb)	3.4 (7.5)



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Vertical Pattern



Horizontal Pattern

Notes

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

External Document Links

[APM40 Series Datasheet](#)

[APM40 Series Installation Instructions](#)