

Optimizer® Dual Polarized Antenna, 1710-2200, 65deg, 18.5-19dBi, 1.9m, VET, 0-10deg

**Product Description**

This antenna is an excellent choice for 3G, PCS, GSM1800 and Mobile TV networks where high gain is required.

**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
- Broadband design
- Dual polarization
- Low profile for low visual impact
- Quick and easy to adjust
- High front-to-back ratio



**Technical Specifications**

**Electrical Specifications**

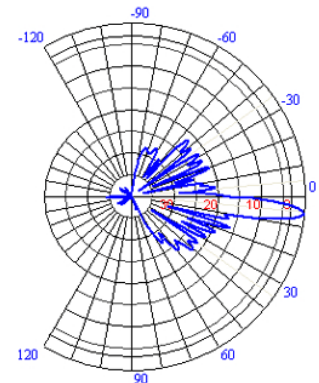
Frequency Range, MHz	1710-1880	1850-1990	1900-2200
Horizontal Beamwidth, deg	67	67	65
Vertical Beamwidth, deg	5	4.8	4.6
Electrical Downtilt, deg	0-10		
Gain, dBi (dBd)	18.5 (16.4)	18.5 (16.4)	19 (16.9)
1st Upper Sidelobe Suppression, dB	> 18 all (typically > 20)		
Front-To-Back Ratio, dB	Typically 30		
Polarization	Dual pol +/-45°		
VSWR	< 1.5:1, < 1.4:1, < 1.4:1		
Isolation between Ports, dB	> 30		
3rd Order IMP @ 2 x 43 dBm, dBc	> 150, >150, N/A		
7th Order IMP @ 2 x 38 dBm, dBc	N/A, N/A, >170		
Impedance, Ohms	50		
Maximum Power Input, W	300		
Lightning Protection	Direct Ground		
Connector Type	(2) 7-16 Long Neck Female		

**Mechanical Specifications**

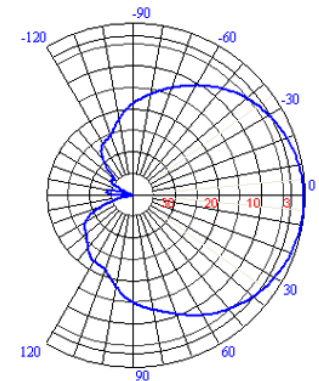
Dimensions - HxWxD, mm (in)	1910 x 175 x 110 (75.2 x 6.9 x 4.3)
Weight w/o Mtg Hardware, kg (lb)	10 (22)
Survival Wind Speed, km/h (mph)	200 (125)
Rated Wind Speed, km/h (mph)	160 (100)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.33 (3.6)
Front Thrust @ Rated Wind, N (lbf)	430 (96.7)
Maximum Thrust @ Rated Wind, N (lbf)	430 (96.7)
Wind Load - Side @ Rated Wind, N (lbf)	190 (42.7)
Wind Load - Rear @ Rated Wind, N (lbf)	210 (47.2)
Radome Material	PVC
Radome Color	Light Grey RAL7035
Mounting Hardware Material	Diecasted Aluminum and Stainless Steel
Shipping Weight, kg (lb)	16 (35.2)
Packing Dimensions, HxWxD, mm (in)	2059 x 267 x 229 (57.83 x 10.5 x 9)

**Ordering Information**

Mounting Hardware	APM40-2
Mounting Pipe Diameter, m (in)	.06-.12 (2.36-4.72)
Mounting Hardware Weight, kg (lb)	3.4 (7.5)



Vertical Pattern



Horizontal Pattern

All information contained in the present datasheet is subject to confirmation at time of ordering