



Optimizer® Cellular Dual Polarized Dual Band Antenna, 790-2200, 65deg, 17-19dBi, 2.6m, VET, 0-10deg

Product Description

This antenna is an ideal choice for dual band site upgrade for high traffic areas. It is applicable for multiple bands such as Digital Dividend, CDMA, GSM, DCS, PCS, UMTS and DVD-SH.

Features/Benefits

- Easy swap out of GSM or CDMA panel for dual band panel
- 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)
- Independent control of electrical downtilt for CDMA-900 and 1800/1900MHz bands
- Optional remote tilt – can be retrofitted
- Low profile for low visual impact
- Quick and easy to adjust
- High front-to-back ratio



Technical Specifications

Electrical Specifications

Frequency Range, MHz	790-894	870-960	1710-1880	1850-1990	1900-2200
Horizontal Beamwidth, deg	67	65	65	62	60
Vertical Beamwidth, deg	7.7	7.2	5.3	5	4.9
Electrical Downtilt, deg	0-10				
Gain, dBi (dBd)	16.5 (14.4)	17 (14.9)	18.2 (16.1)	18.5 (16.4)	19 (16.9)
1st Upper Sidelobe Suppression, dB	> 18 Typical				
Upper Sidelobe Suppression, dB	> 16				
Front-To-Back Ratio, dB	>25	>26	>25	>25	>25
Polarization	Dual pol +/-45°				
VSWR	< 1.5:1				
Isolation between Ports, dB	>28-30	>30	>30	>30	>30
3rd Order IMP @ 2 x 43 dBm, dBc	>150				
Impedance, Ohms	50				
Maximum Power Input, W	500	500	300	300	300
Lightning Protection	Direct Ground				
Connector Type	(4) 7-16 DIN Female				

Mechanical Specifications

Dimensions - HxWxD, mm (in)	2703 x 300 x 161 (106.4 x 11.81 x 6.3)
Weight w/o Mtg Hardware, kg (lb)	37.0 (81.6)
Survival Wind Speed, km/h (mph)	200 (125)
Rated Wind Speed, km/h (mph)	160 (100)
Max Wind Loading Area, m ² (ft ²)	0.81 (8.7)
Front Thrust @ Rated Wind, N (lbf)	1144 (257)
Wind Load - Side @ Rated Wind, N (lbf)	288 (65)
Wind Load - Rear @ Rated Wind, N (lbf)	1081 (243)
Radome Material	PVC
Radome Color	Light Grey RAL7035
Mounting Hardware Material	Diecasted Aluminum and Galvanized Steel
Packing Dimensions, HxWxD, mm (in)	2869 x 398 x 330 (113.0 x 15.7 x 13.0)

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)

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