



Dual band, cross polarized GSM/DCS-UMTS panel antenna with independent variable electrical tilt for high traffic areas where capacity enhancement can be provided by use of dual 900/1800-2170MHz services.

FEATURES / BENEFITS

- Independent control of electrical downtilt for 900 and 1800-2170MHz bands.
- Easy swap—out of GSM panel for dual band panel & upgrade to UMTS.
- Low profile for low visual impact.
- High upper sidelobe suppression.
- Quick and easy to adjust.
- Continuously variable downtilt provides enhanced precision in controlling intercell interference.
- High front-to-back ratio.
- Radome can be painted to blend with environment.



Technical features

ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	870-960	1710-1900	1900-2170
Gain	dBi (dBd)	14.4 (12.3)	17.0 (14.9)	17.0 (14.9)
Horizontal Beamwidth	deg	65	64	60
Vertical Beamwidth	deg	14.7	7	6.8
Electrical Downtilt Range	deg	0-10	2-10	2-10
1st Upper Sidelobe Suppression	dB	>16 (typically >20)		
Upper Sidelobe Suppression	dB	>16 (typically >20)		
Front-To-Back Ratio	dB	>25		
Polarization		Dual pol +/-45°		
VSWR		< 1.5:1		
Isolation between Ports	dB	>30		
Isolation Between Bands	dB	GSM - DCS >30, GSM - UMTS >27, GSM - UMTS >30,		
3rd Order IMP @ 2 x 43 dBm	dBc	>150, >150, N/A		
7th Order IMP @ 2x46 dBm	dBc	N/A, N/A, >170		
Impedance	Ohms	50		
Maximum Power Input	W	500	300	300
Beamwidth Approximate	deg	65		
Frequency/Operating Band		GSM 900 (872-915, 917-960 MHz) 3G/UMTS (Single, Broad, Dual and Triple-Band)		
Antenna Type		Dual Polarized-Dual Band		
Electrical Down Tilt Option		Variable		



MECHANICAL SPECIFICATIONS

Lightning Protection		Direct Ground
Connector Type/Location		(4) 7-16 DIN Female/Bottom
Dimensions - HxWxD	mm (in)	1349 x 328 x 128 (53 x 12.91 x 5.04)
Weight w/o Mtg Hardware	kg (lb)	18 (39.6)
Weight w/ Mtg Hardware	kg (lb)	20.8 (45.7)
Survival/Rated Wind Speed	km/h (mph)	200 (125) / 160 (100)
Wind Load @ Rated Wind, Front	N (lbf)	596 (134)
Wind Load @ Rated Wind, Max.	N (lbf)	596 (134)
Wind Load @ Rated Wind, Side	N (lbf)	228 (51)
Wind Load @ Rated Wind, Rear	N (lbf)	387 (87)
Mount Type		Downtilt
Height (Approximate)	ft.	4.5

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

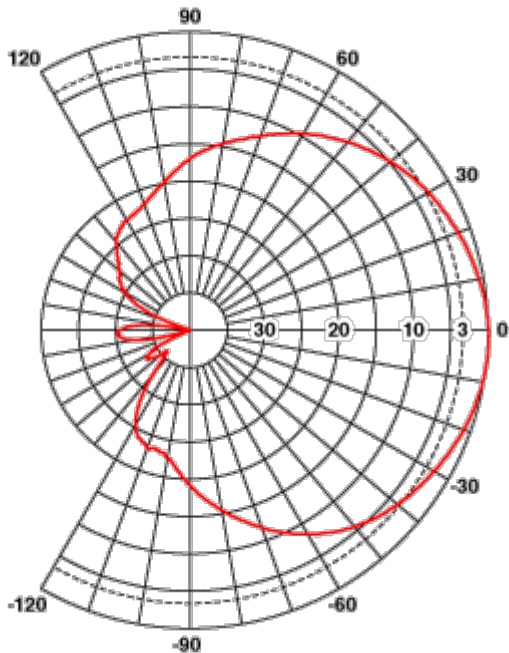
ORDERING INFORMATION

Shipping Weight	kg (lb)	26.8 (59)
Packing Dimensions, HxWxD	mm (in)	1520 x 400 x 260 (59.8 x 15.7 x 10.2)
Mounting Hardware		APM40-2
Mounting Pipe Diameter	mm (in)	60 - 120 (2.36 - 4.72)
Mounting Hardware Weight	kg (lb)	3.4 (7.5)

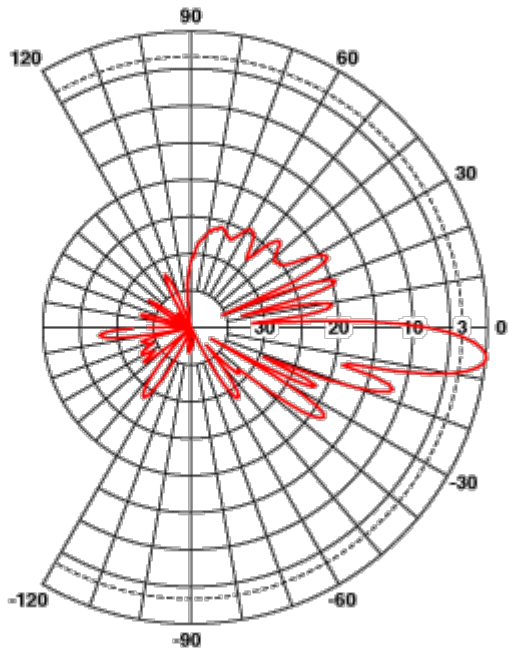


APX13GV-15DWVB-C

Optimizer® Dual-Band Dual Polarized, 870-2170, 65deg, 14.4/17.0/17.0dBi, 1.3m, VET, 0-10/2-10deg



Horizontal Pattern

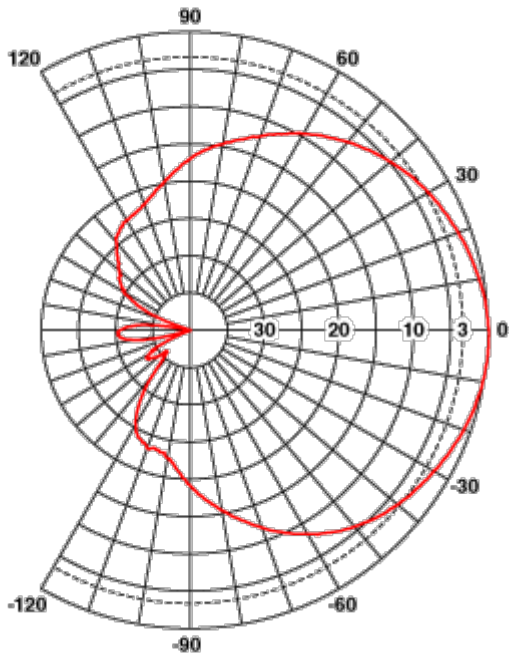


Vertical Pattern-DCS



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Horizontal Pattern

External Document Links

[APM40 Series Datasheet](#)

[APM40 Series Installation Instructions](#)

Notes

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