



A combination of two X-Polarized antennas in a single radome, this pair of variable tilt antennas 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 (1695-2200 MHz). The antenna comes pre-connected with two antenna control units (ACU).

**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).
- Gain tracking — difference between AWS (1695-1755 MHz) and (2110-2200 MHz) <1dB
- Two X-Polarised panels in a single radome.
- Azimuth horizontal beamwidth difference (1695-1755 MHz) and (2110-2200 MHz) <5 deg
- Low profile for low visual impact.
- Dual polarization; Broadband design.
- Includes (2) AISG 2.0 Compatible ACU-A20-N or ACU-A20-S antenna control units.



**Technical features**

**ELECTRICAL SPECIFICATIONS**

<b>Frequency Range</b>	MHz	1695-2200
<b>Gain</b>	dBi (dBd)	18.0 +/- 0.5 (15.9)
<b>Horizontal Beamwidth</b>	deg	65
<b>Vertical Beamwidth</b>	deg	5.9 to 7.7
<b>Electrical Downtilt Range</b>	deg	0-10
<b>1st Upper Sidelobe Suppression</b>	dB	> 18 all (typically > 20)
<b>Upper Sidelobe Suppression</b>	dB	> 18 all (typically > 20)
<b>Front-To-Back Ratio</b>	dB	>26 (typically 28)
<b>Polarization</b>		Dual pol +/-45°
<b>VSWR</b>		< 1.5:1
<b>Isolation between Ports</b>	dB	> 30
<b>3rd Order IMP @ 2 x 43 dBm</b>	dBc	> 150 (155 Typical)
<b>Impedance</b>	Ohms	50
<b>Maximum Power Input</b>	W	300
<b>Beamwidth Approximate</b>	deg	65
<b>Frequency/Operating Band</b>		3G/UMTS (Single, Broad, Dual and Triple-Band) AWS Band (1695-1755, 2110-2155 MHz)
<b>Antenna Type</b>		Dual Polarized-Side by Side
<b>Electrical Down Tilt Option</b>		Variable



**MECHANICAL SPECIFICATIONS**

Lightning Protection		Direct Ground
Connector Type/Location		(4) 7-16 Long Neck Female/Bottom
Dimensions - HxWxD	mm (in)	1420 x 331 x 80 (55.9 x 13 x 3.15)
Weight w/o Mtg Hardware	kg (lb)	18.5 (40.7)
Weight w/ Mtg Hardware	kg (lb)	19 (41.8)
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)	756 (170)
Wind Load @ Rated Wind, Max.	N (lbf)	756 (170)
Wind Load @ Rated Wind, Side	N (lbf)	231 (52)
Wind Load @ Rated Wind, Rear	N (lbf)	408 (92)
Mount Type		Downtilt Kit w/Scissor Kit
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 + APM40-E2
Radiating Element Material		Brass
Reflector Material		Aluminum

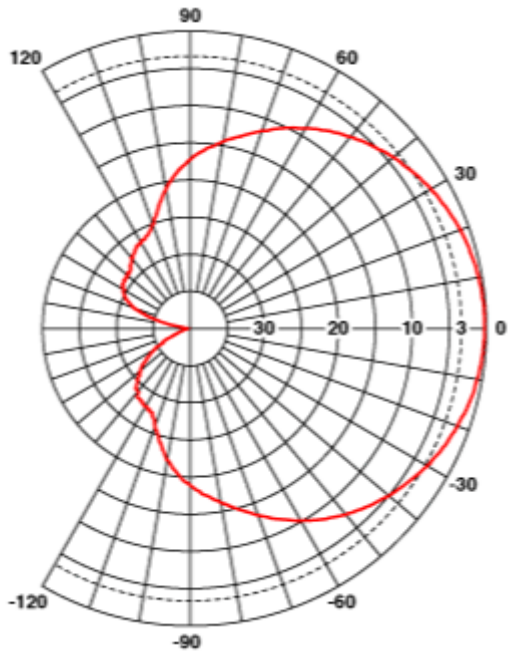
**ORDERING INFORMATION**

Shipping Weight	kg (lb)	24.5 (53.9)
Packing Dimensions, HxWxD	mm (in)	1520 x 408 x 198 (59.8 x 16 x 7.8)
Mounting Hardware		APM40-2 + APM40-E2
Mounting Pipe Diameter	mm (in)	60 - 120 (2.36 - 4.72 )
Mounting Hardware Weight	kg (lb)	3.5 (7.7)

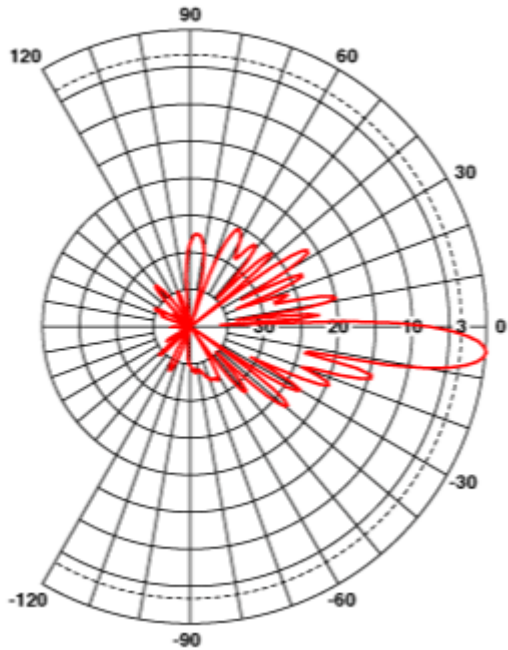


**APX16DWV-16DWVS-E-A20**

Optimizer® Side-by-Side Dual Polarized Antenna, 1695-2200, 65deg, 18dBi, 1.4m, VET, 0-10deg RET



Horizontal Pattern

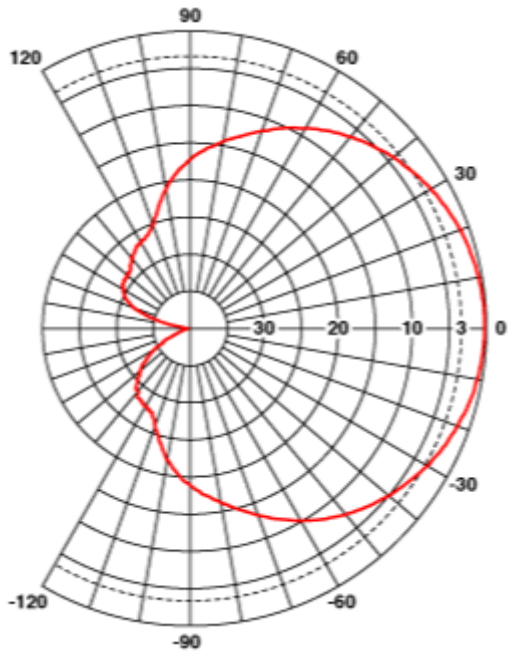


Vertical Pattern



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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.