



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

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

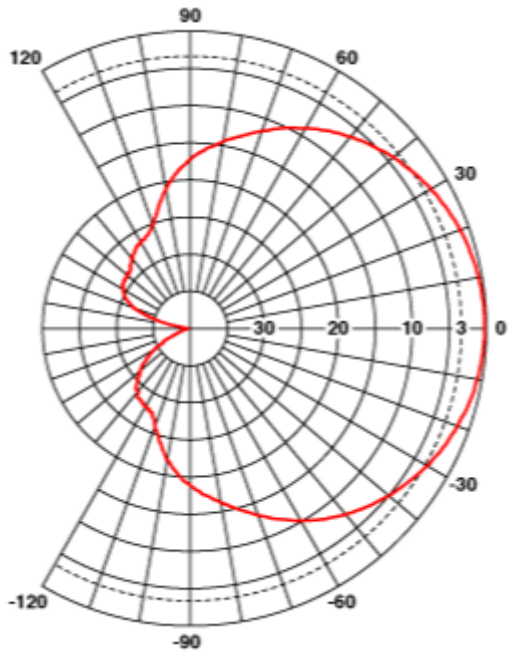
ORDERING INFORMATION

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)

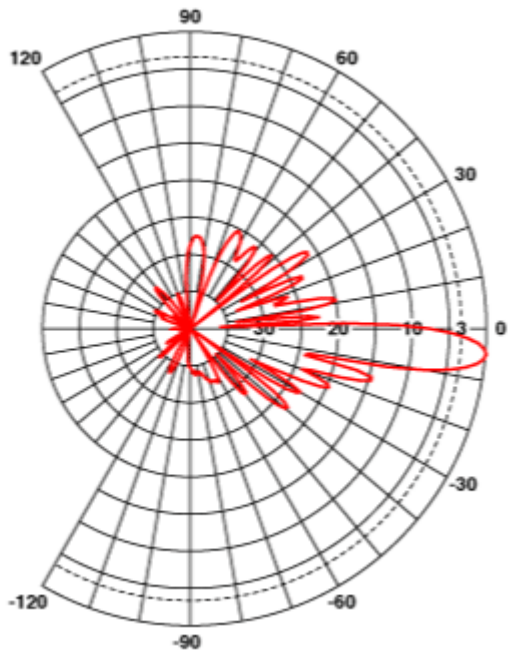


APX16DWV-16DWVS-E-A20

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



Horizontal Pattern

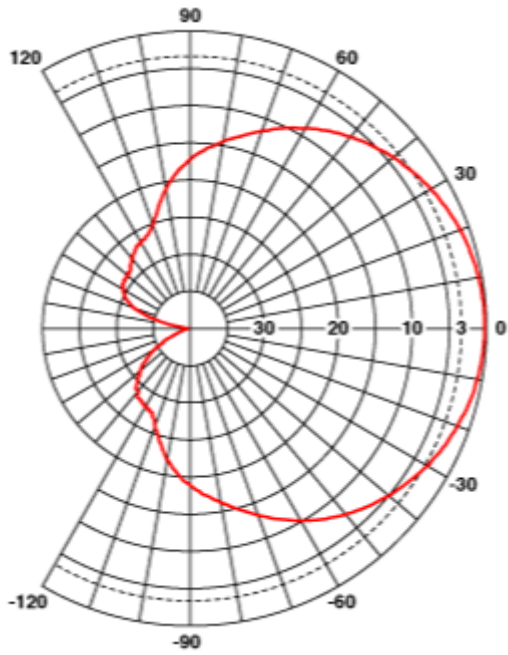


Vertical Pattern



APX16DWV-16DWVS-E-A20

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



Horizontal Pattern

External Document Links

[APM40 Series Datasheet](#)

[APM40 Series Installation Instructions](#)

Notes

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