



This X-Polarized variable tilt antenna 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 ASW frequency band (1710-2155 MHz). The antenna comes pre-connected with one antenna control unit (ACU).

**FEATURES / BENEFITS**

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is in-field adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (typically <-20dB)
- Gain Tracking - Difference between (1695-1755 MHz) and (2110-2200 MHz) <1dB.
- Azimuth beamwidth difference between (1695-1755 MHz) and (2110-2200 MHz) <5 deg
- Low profile for low visual impact.
- Dual polarization; Broadband design.
- Includes AISG 2.0 Compatible ACU-A20-N or ACU-A20-S Antenna Control Unit.



**Technical features**

**ELECTRICAL SPECIFICATIONS**

<b>Frequency Range</b>	MHz	1695-2200
<b>Gain</b>	dBi (dBd)	18.8 (16.7) Avg. across band
<b>Horizontal Beamwidth</b>	deg	65 +/-5 (65.1 average across band)
<b>Vertical Beamwidth</b>	deg	4.4 to 5.5
<b>Electrical Downtilt Range</b>	deg	0-10
<b>1st Upper Sidelobe Suppression</b>	dB	Typically >20
<b>Front-To-Back Ratio</b>	dB	>26 (Typically 29)
<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>7th Order IMP @ 2x38 dBm</b>	dBc	>170
<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, 2110-2200 MHz)
<b>Antenna Type</b>		Dual Polarized
<b>Electrical Down Tilt Option</b>		Variable



**MECHANICAL SPECIFICATIONS**

Lightning Protection		Direct Ground
Connector Type/Location		(2) 7-16 Long Neck Female/Bottom
Dimensions - HxWxD	mm (in)	1953 x 169 x 80 (76.0 x 6.65 x 3.15)
Weight w/o Mtg Hardware	kg (lb)	11.97 (26.34)
Weight w/ Mtg Hardware	kg (lb)	14.9 (32.79)
Survival/Rated Wind Speed	km/h (mph]	200 (125)
Wind Load @ Rated Wind, Front	N (lbf)	568.1 (127.7)
Wind Load @ Rated Wind, Max.	N (lbf)	568.1 (127.7)
Wind Load @ Rated Wind, Side	N (lbf)	331.5 (74.5)
Wind Load @ Rated Wind, Rear	N (lbf)	274.4 (61.7)
Mount Type		Downtilt
Height (Approximate)	ft.	625

**TESTING AND ENVIRONMENTAL**

Operation temperature	°C (°F)	-40 to 60 (-40 to 140 )
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**MATERIAL**

Radome Material/Color		Light Grey RAL7035
Mounting Hardware Material		APM40-2
Radiating Element Material		Brass
Reflector Material		Aluminum

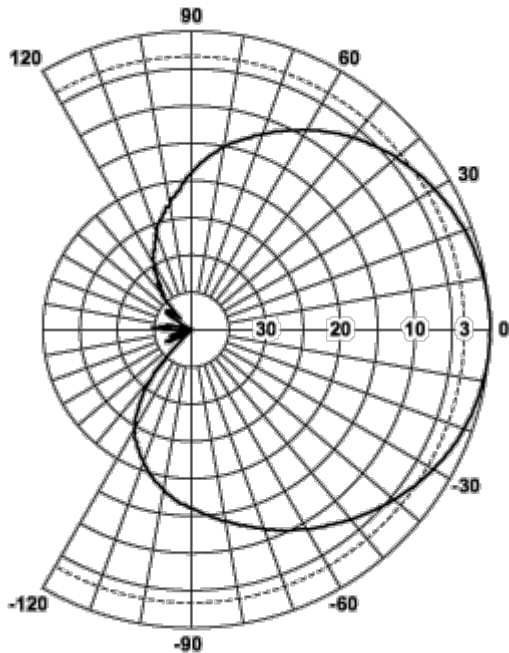
**ORDERING INFORMATION**

Shipping Weight	kg (lb)	20 (44)
Packing Dimensions, HxWxD	mm (in)	1950 x 230 x 189 (76.77 x 9.06 x 7.44)
Mounting Hardware		APM40-2
Mounting Pipe Diameter	mm (in)	60 - 120 (2.36 - 4.72 )
Mounting Hardware Weight	kg (lb)	3.4 (7.5)

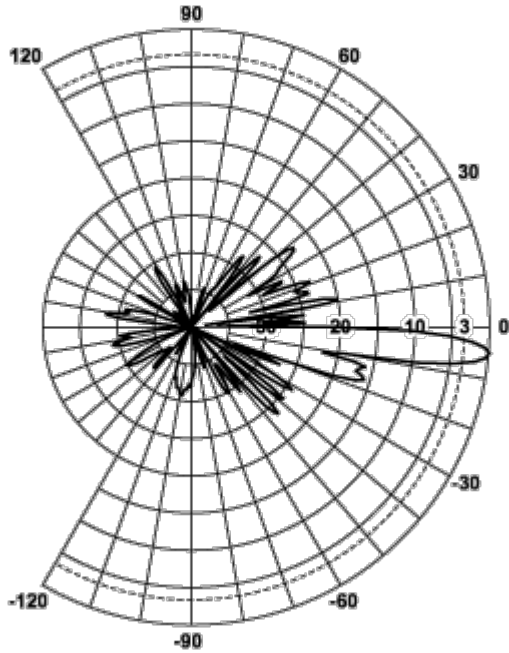


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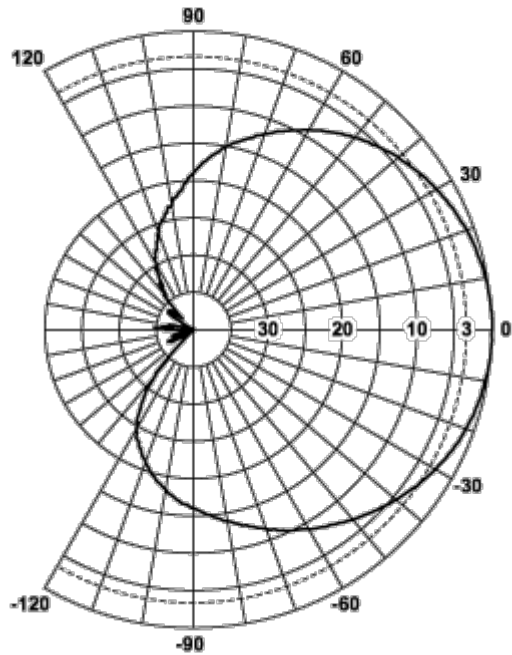
Optimizer® Panel Dual Polarized 1695-2200 MHz Antenna Equipped with AISG 2.0 ACU Motor



Horizontal Pattern



Vertical Pattern



Horizontal Pattern

External Document Links

[APM40 Series Datasheet](#)

[APM40 Series Installation Instructions](#)

Notes

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