

## APXV18-203219-C-A20

### Features

This variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It is ideal for 3G, 4G, GSM, CDMA and Mobile TV networks where high gain is required.

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10°.
- Includes (1) AISG 2.0 compatible ACU-A20-S antenna control unit
- Excellent upper sidelobe suppression - allows strong mechanical tilt
- Optional remote tilt - can be retrofitted
- High front-to-back ratio
- Rugged construction - high reliability
- Broadband design
- Dual polarization
- Low profile - enables low visual impact

<b>PRODUCT OVERVIEW</b>	Frequency Range (MHz)	1695-22200
	Connector	2 PORTS
	Polarization	Dual Pol ±45°
	Azimuth Beamwidth (avg)	32°
	Gain	21 dBi
	Electrical Downtilt	Variable 0-10°
	Dimensions	1375 x 288 x 118 mm (54.1 x 11.3 x 4.6 in)

### ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXV18-203219-C-A20	ACU-A20-S Field Replaceable RET Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	22 kg (48 lbs)

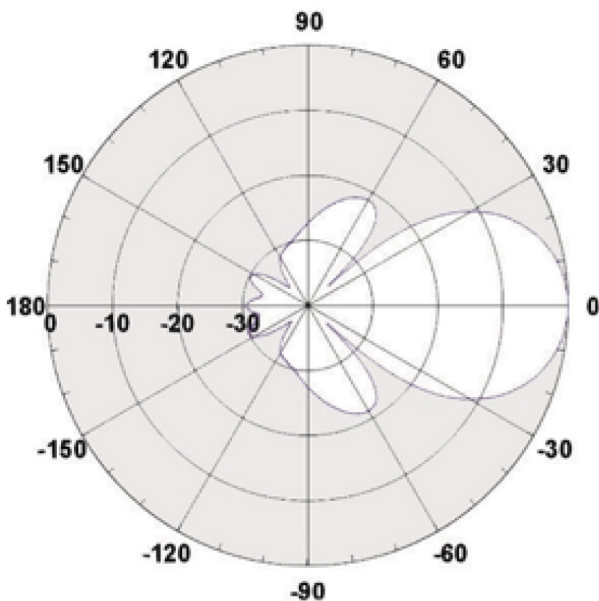


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

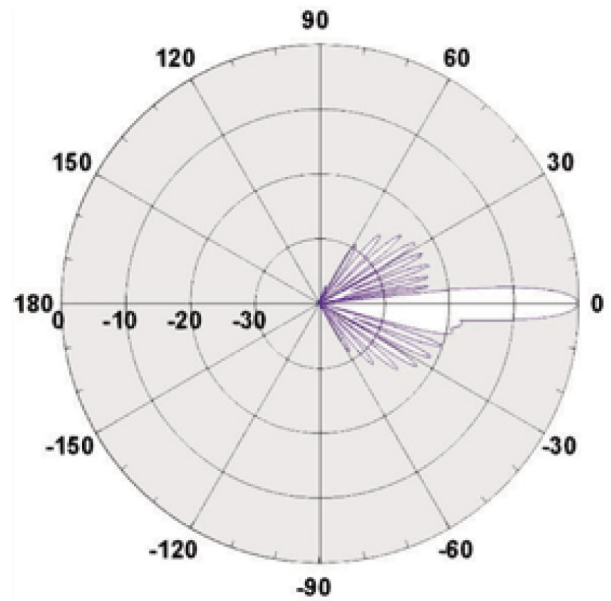
## APXV18-203219-C-A20

### ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	1695-2200		
	MHz	1695-1880	1850-1990	1900-2200
Polarization	---	±45°		
Gain	dBi	20.4	20.6	21.1
Beamwidth Approximate	degrees	32°		
Azimuth Beamwidth (3 dB)	degrees	34°	33°	33°
Elevation Beamwidth (3 dB)	degrees	7.4°	7.0°	6.5°
Electrical Downtilt	degrees	Variable 0-10°		
Impedance	Ohms	50Ω		
VSWR (Return Loss)	---	< 1.5:1 (-14 dB)		
Passive Intermodulation	dBc	≥ 153 (3rd Order for 2x20 W Carriers)		
Front-to-Back Ratio	dB	30 Typical		
Upper Side Lobe Suppression	dB	> 17 Typical		
First Upper Side Lobe Suppression	dB	> 17 Typical		
Maximum Effective Power Per Port	Watts	300 W		
Isolation Between Ports	dB	> 30		
Operating Band	---	3G/UMTS (Single, Broad, Dual and Triple-Band) AWS Band (1695-1755, 2110-2200 MHz)		



**AZIMUTH PATTERN**



**ELEVATION PATTERN**

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### MECHANICAL SPECIFICATIONS

Length	mm (in)	1375 (54.1)
Width	mm (in)	288 (11.3)
Depth	mm (in)	118 (4.6)
Net Weight - Antenna Only	kg (lbs)	13.6 (30)
Net Weight - Mounting Hardware Only	kg (lbs)	3.4 (7.5)
Applied Wind Load Standard	---	DIN 1055-4
Wind Load Rated at 160 km/h (100 mph)	Front	N (lbf) 456 (102)
	Side	N (lbf) 187 (42)
	Rear	N (lbf) 492 (110)
	Maximum	N (lbf) 492 (110)
Survival Wind Speed / Rated Wind Speed	km/h (mph)	200 (125) / 160 (100)
Connector Type	---	(2x) 7-16 Long Neck Female at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	ASA UV4B
Radiating Element Material	---	Aluminum
Reflector Material	---	Aluminum
Lightning Protection	---	Direct Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 1534 x 364 x 314 (60.4 x 14.3 x 12.4)
	Shipping Weight	kg (lbs) 22 (48)

### ENVIRONMENTAL SPECIFICATIONS

Environmental Standard	---	ETS 300 019
Operating Temperature	degrees	-40° to +60° C (-40° to +140° F)
Product Environmental Compliance	---	Product is RoHS Compliant


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**ACCESSORIES** Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 60-120 mm (2.4-4.7 in) <i>Shipped with antenna</i>	APM40-2	3.4 kg (7.5 lbs)

**INSTALLATION** Please read all installation notes before installing product.

	Always attach the antenna using all mounting points.
	Do not install antenna with the connectors facing upwards.

**EXTERNAL DOCUMENT LINKS**

[APM40 Mounting Kit Series Installation Instructions](#)

**NOTES**

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)