

## APXV18-209015-C-A20

### Features

This x-polarized variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range. The antenna comes pre-connected with one antenna control unit (ACU).

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10°.
- High suppression of all upper sidelobes (typically < -18dB)
- Low profile for low visual impact
- Dual polarization
- Broadband design
- Includes AISG 2.0 compatible ACU-A20-S antenna control unit



<b>PRODUCT OVERVIEW</b>	Frequency Range (MHz)	1710-2170
	Connector	2 PORTS
	Polarization	Dual Pol ±45°
	Azimuth Beamwidth (avg)	88°
	Gain	17.9 / 17.7 dBi
	Electrical Downtilt	Variable 0-10°
	Dimensions	1850 x 169 x 80 mm (72.0 x 6.7 x 3.2 in)

### ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXV18-209015-C-A20	ACU-A20-S Field Replaceable RET Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	17.5 kg (38.5 lbs)

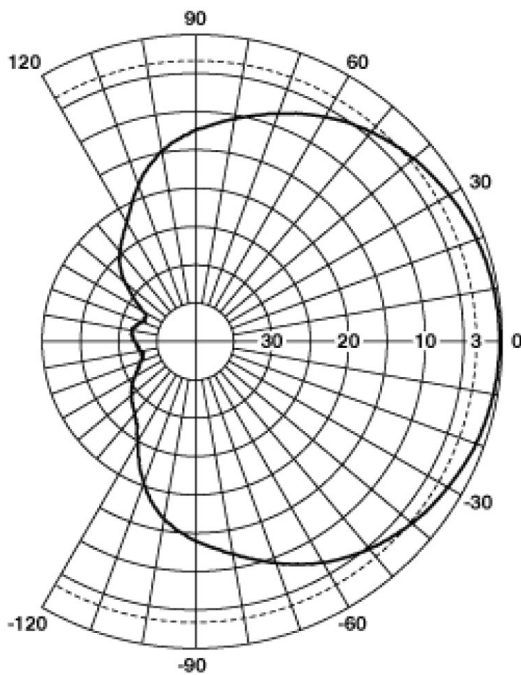


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage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

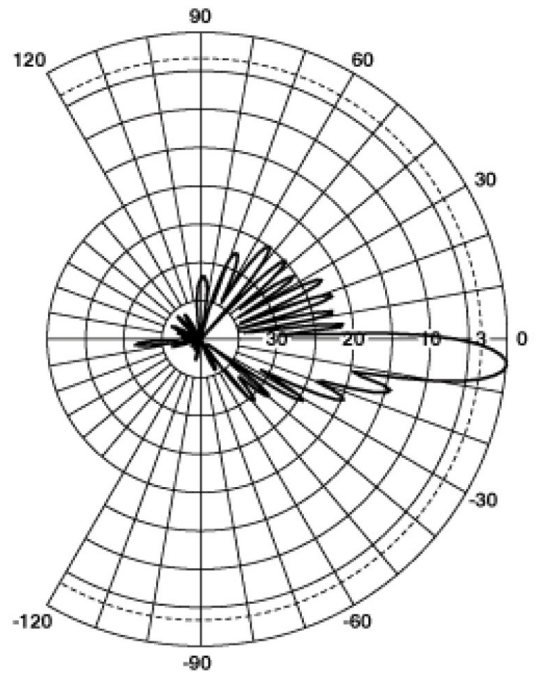
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### ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	1710-2170	
	MHz	1710-1900	1900-2170
Polarization	---	±45°	
Gain	dBi	17.9	17.7
Beamwidth Approximate	degrees	90°	
Azimuth Beamwidth (3 dB)	degrees	88°	
Elevation Beamwidth (3 dB)	degrees	5.1°	4.5°
Electrical Downtilt	degrees	Variable 0-10°	
Impedance	Ohms	50Ω	
VSWR	---	< 1.5:1	
Passive Intermodulation 3rd Order for 2x20 W Carriers	dBc	≥ 153	
Front-to-Back Ratio	dB	> 28	
Upper Side Lobe Suppression	dB	> 18 all other (Typically > 20)	
First Upper Side Lobe Suppression	dB	> 18 all other (Typically > 20)	
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 (1710-1755, 2110-2155 MHz)	



**AZIMUTH PATTERN**



**ELEVATION PATTERN**

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### MECHANICAL SPECIFICATIONS

Length	mm (in)	1850 (72.0)
Width	mm (in)	169 (6.7)
Depth	mm (in)	80 (3.2)
Net Weight - Antenna Only	kg (lbs)	11.5 (25.3)
Net Weight - Mounting Hardware Only	kg (lbs)	3.4 (7.5)
Applied Wind Load Standard	---	DIN 1055-4
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 557 (125)
	Side	N (lbf) 325 (73)
	Rear	N (lbf) 269 (60)
	Maximum	N (lbf) 557 (125)
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	---	Fiberglass
Radiating Element Material	---	Brass
Reflector Material	---	Aluminum
Lightning Protection	---	Direct Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 2020 x 260 x 200 (79.5 x 10.2 x 7.8)
	Shipping Weight	kg (lbs) 17.5 (38.5)

### 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

## APXV18-209015-C-A20

**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](#)