APXV18-209014-C-A20

Features

This x-polarized variable tilt antenna provides exceptional supression 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

PRODUCT OVERVIEW	Frequency Range (MHz)	1710-2170
	Connector	2 PORTS
	Polarization	Dual Pol ±45°
	Azimuth Beamwidth (avg)	88°
	Gain	16.5 dBi
	Electrical Downtilt	Variable 0-10°
	Dimensions	1349 x 169 x 80 mm (53.0 x 6.7 x 3.2 in)

ORDERING OPTIONS Select from the following ordering options

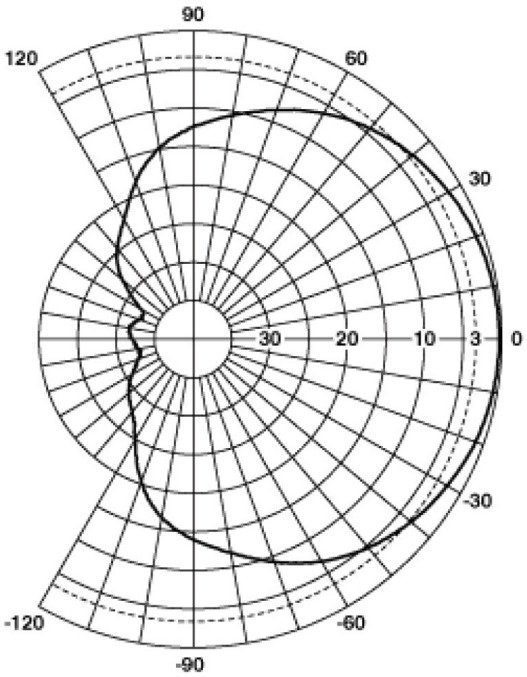
ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXV18-209014-C-A20	ACU-A20-S Field Replaceable RET Included	APM40-2 Beam Tilt Kit Included	60-120 mm (2.4-4.7 in)	15.5 kg (34 lbs)

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.

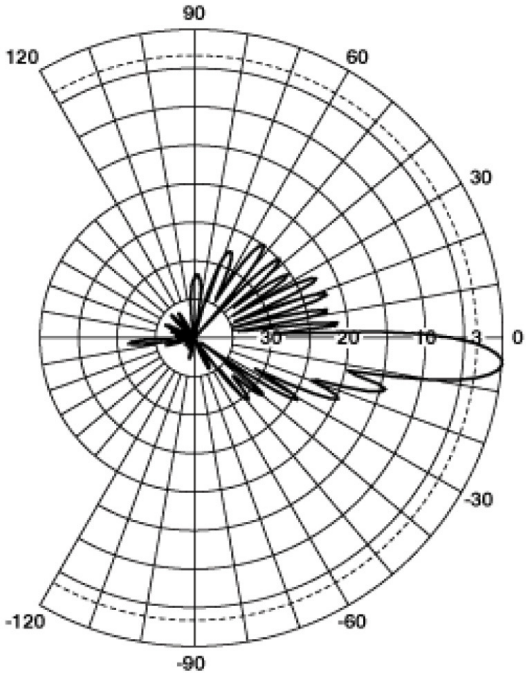
APXV18-209014-C-A20

ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	1710-2170	
	MHz	1710-1900	1900-2170
Polarization	---	±45°	
Gain	dBi	16.5	
Beamwidth Approximate	degrees	90°	
Azimuth Beamwidth (3 dB)	degrees	88°	
Elevation Beamwidth (3 dB)	degrees	7.0°	6.4°
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	> 26	
Upper Side Lobe Suppression	dB	> 17 all other (Typically > 20)	
First Upper Side Lobe Suppression	dB	> 17 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

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.

APXV18-209014-C-A20

MECHANICAL SPECIFICATIONS

Length		mm (in)	1349 (53.0)
Width		mm (in)	169 (6.7)
Depth		mm (in)	80 (3.2)
Net Weight - Antenna Only		kg (lbs)	8.5 (18.7)
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)	406 (91)
	Side	N (lbf)	236 (53)
	Rear	N (lbf)	196 (44)
	Maximum	N (lbf)	406 (91)
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
Shipping	Packing Size (Length x Width x Depth)	mm (in)	1520 x 260 x 200 (59.8 x 10.2 x 7.8)
	Shipping Weight	kg (lbs)	15.5 (34)

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

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.

APXV18-209014-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) *Shipped with antenna*	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

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.