APXV9RR13-C-NA20

Features

This x-polarized side-by-side variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range.

- Variable electrical downtilt provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-9°
- High suppression of all upper sidelobes (typically < -18 dB)
- Low profile for low visual impact
- Dual polarization
- Broadband design
- AISG 2.0 compatible antenna control unit

PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 1710-2170	
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	90°	
	Gain	16.5 dBi	
	Electrical Downtilt	0-9°	
	Dimensions	1349 x 356 x 80 mm (53.0 x 14.0 x 3.2 in)	

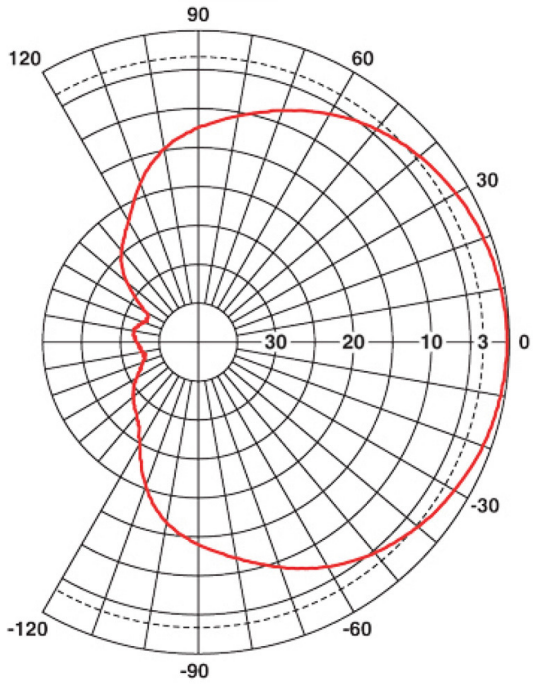
ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGUATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER
APXV9RR13-C-NA20	Pre-commissioned ACU Included	APM40-1 Beam Tilt Kit and 30019995 Included	60-120 mm (2.4-4.7 in)

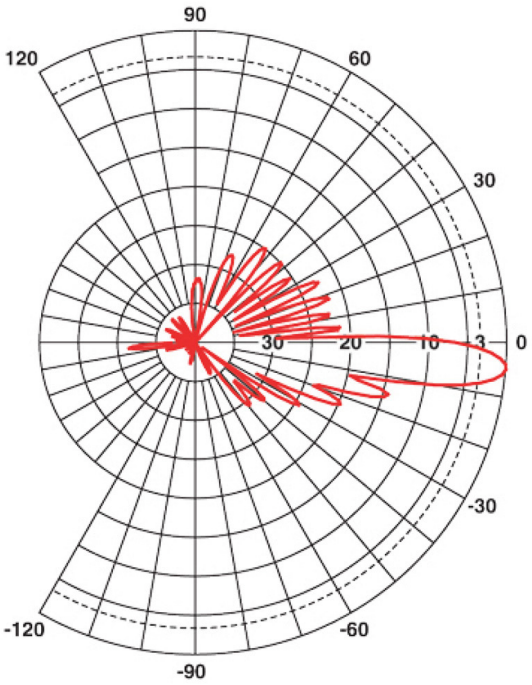
APXV9RR13-C-NA20

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°	94°
Elevation Beamwidth (3 dB)		degrees	7.0°	6.4°
Electrical Downtilt		degrees	Variable 0-9°	
Impedance		Ohms	50Ω	
VSWR			< 1.5:1	
Passive Intermodulation	3rd Order for 2x20 W Carriers	dBc	> 153, NA	
	7th Order for 2x40 W Carriers		NA, > 170	
Front-to-Back Ratio		dB	> 26	
First Upper Side Lobe		dB	> 17 all others (typically > 20)	
Upper Sidelobe Suppression		dB	> 17 all others (typically > 20)	
Cross Polar Discrimination (XPD) 0°		dB	> 15	
Cross Polar Discrimination (XPD) ±60°		dB	> 10	
HBW Squint Across Same Band Ports		degrees	±5°	
Maximum Effective Power Per Port		Watts	300 W	
Isolation Between Ports		dB	> 30	



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.

APXV9RR13-C-NA20

MECHANICAL SPECIFICATIONS

Length		mm (in)	1349 (53.0)
Width		mm (in)	356 (14.0)
Depth		mm (in)	80 (3.2)
Net Weight - Antenna Only		kg (lbs)	18.1 (40)
Wind Load	Front	N (lbf)	677 (152)
Rated at 150 km/h (93 mph)	Side	N (lbf)	70 (16)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	240 (150) / 160 (100)
Connector Type		--	(4x) 7-16 Long Neck Female at Bottom
Lightning Protection		---	Direct Ground

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
Beam Tilt Mounting Bracket Kit for Pole Diameter 60-120 mm (2.4-4.7 in) *Shipped with antenna*	APM40-1 and 30019995

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

Available Configurations: APXV9RR13-C-NA20 - precommissioned ACUs included and 0.5m AISG jumper.

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

For Radiating Patterns: Request pattern files