

APXVLL06-C-A20

Features

This antenna is an ideal choice for 4x4 MIMO applications in visually sensitive areas. It can be used for multiple bands such as DCS, PCS, UMTS and LTE 2.6.

- Dual band cross-polarized with 2 arrays (4 ports), 2x 1695-2690 MHz
- Ultra-broadband design from DCS to LTE 2600
- Variable electrical downtilt - provides enhanced precision in controlling intercell interference
- The tilt is infield adjustable 5-18°
- Field replaceable RET
- Left and right arrays tilt together
- Enable MIMO 4x4 or 4-way Rx diversity - ideal solution for LTE advance
- Quick and easy to install - reduces installation time and costs



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 1695-2690	
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Gain	15.0 dBi	
	Electrical Downtilt	5-18°	
	Dimensions	609 x 288 x 118 mm (24.0 x 11.4 x 4.7 in)	

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVLL06-C-A20	Field Replaceable RET Included	APM40-6 Beam Tilt Kit Included	50-120 mm (2.0-4.7 in)	13 kg (28.6 lbs)

APXVLL06-C-A20

ELECTRICAL SPECIFICATIONS Left Array

Y1

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-2010	1900-2170	2300-2400	2500-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	13.4 ± 0.3	13.6 ± 0.4	13.7 ± 0.4	14.2 ± 0.4	14.5 ± 0.5
	Max Gain	dBi	13.7	14.0	14.1	14.6	15.0
Azimuth Beamwidth (3 dB)		degrees	67.6° ± 2.4°	68.0° ± 3.8°	69.1° ± 4.6°	66.0° ± 2.3°	63.4° ± 1.8°
Elevation Beamwidth (3 dB)		degrees	18.0° ± 0.8°	17.1° ± 1.2°	16.0° ± 1.2°	13.9° ± 0.6°	12.6° ± 0.5°
Electrical Downtilt		degrees	5-18°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	< 1.5:1 (> 14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153				
Front-to-Back Ratio, Total Power, ± 30°		dB	> 20.2	> 21.5	> 21.4	> 20.8	> 21.3
First Upper Side Lobe		dB	> 15.6	> 21.4	> 21.1	> 21.9	> 22.5
Maximum Effective Power Per Port		Watts	200 W				
Isolation Between Ports		dB	> 26				

ELECTRICAL SPECIFICATIONS Right Array

Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-2010	1900-2170	2300-2400	2500-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	13.4 ± 0.3	13.6 ± 0.3	13.8 ± 0.3	14.2 ± 0.3	14.5 ± 0.5
	Max Gain	dBi	13.7	13.9	14.1	14.5	15.0
Azimuth Beamwidth (3 dB)		degrees	67.9° ± 3.4°	68.5° ± 4.7°	68.1° ± 4.5°	65.5° ± 4.0°	63.2° ± 1.4°
Elevation Beamwidth (3 dB)		degrees	18.1° ± 1.0°	17.1° ± 1.0°	16.0° ± 1.1°	14.0° ± 0.8°	12.7° ± 0.4°
Electrical Downtilt		degrees	5-18°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	< 1.5:1 (> 14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153				
Front-to-Back Ratio, Total Power, ± 30°		dB	> 18.4	> 19.8	> 20.7	> 21.6	> 20.5
First Upper Side Lobe		dB	> 15.9	> 21.2	> 20.1	> 20.2	> 20.3
Maximum Effective Power Per Port		Watts	200 W				
Isolation Between Ports		dB	> 26				

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.

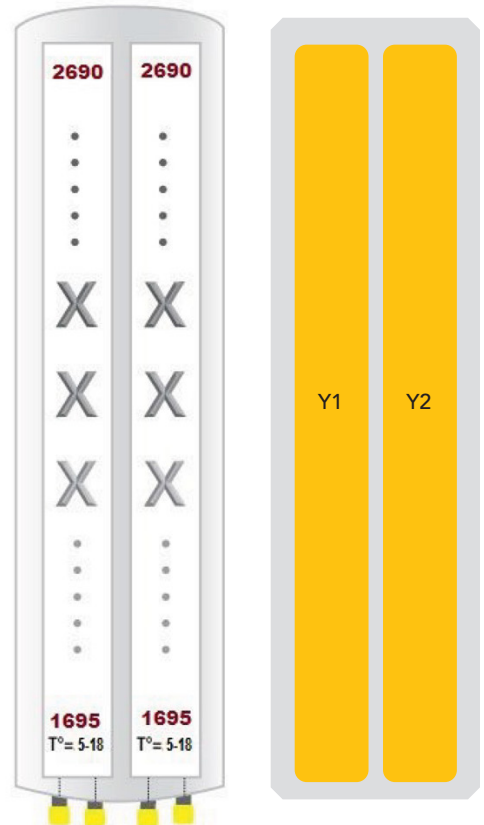
APXVLL06-C-A20

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
Y1	1695-2690 MHz	1-2	(2x) 7-16 Female	Y1	RFxxxxxxxxxx-Y1
Y2	1695-2690 MHz	3-4	(2x) 7-16 Female		



The illustrations are not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	609 (24.0)
Width		mm (in)	288 (11.4)
Depth		mm (in)	118 (4.7)
Mechanical Distance between Mounting Points		mm (in)	515 (20.3)
Net Weight - Antenna Only		kg (lbs)	6 (13)
Net Weight - Mounting Hardware Only		kg (lbs)	4 (8.8)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	174 (39)
	Side	N (lbf)	71 (16)
	Rear	N (lbf)	188 (42)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	240 (150)
Connector Type		--	(4x) 7-16 Long Neck Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color		---	Light Grey RAL7035
Radome Material		---	ASA
Lightning Protection		---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	760 x 370 x 340 (30.0 x 14.6 x 13.4)
	Shipping Weight	kg (lbs)	13 (28.6)

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.

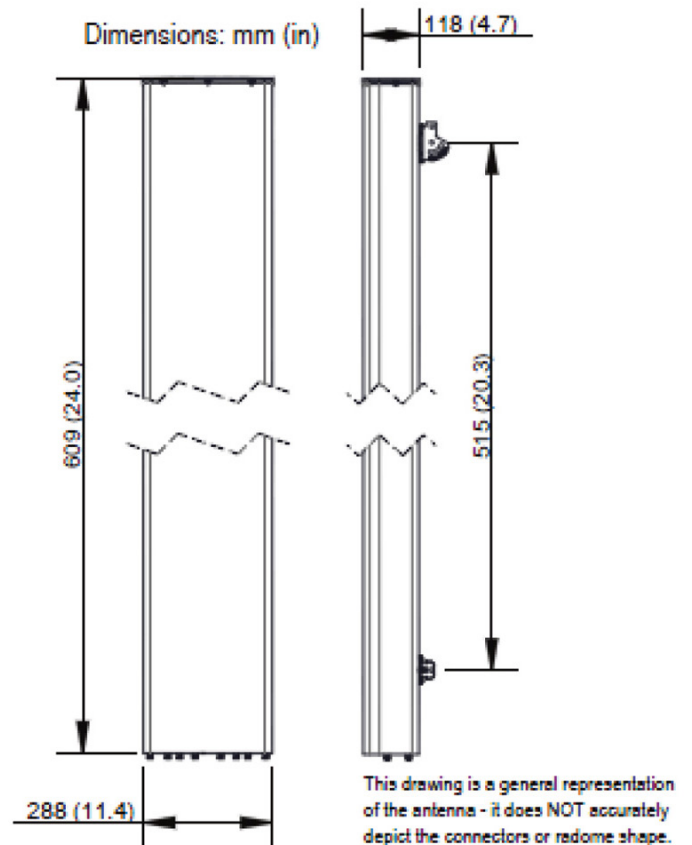
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-120 mm (2.0-4.7 in) <i>Shipped with antenna</i>	APM40-6	4 kg (8.8 lbs)

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

Specifications follow BASTA guidelines.

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

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