

APXVLL21B_43-C-I20

Features

- 4 ports / 2 cross pol systems in high band (1710-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW version -2.02
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 1710-2690	
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Electrical Downtilt	2-10°	
Dimensions	1900 x 320 x 123 mm (74.8 x 12.6 x 4.8 in)		

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVLL21B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	27.4 kg (60.4 lbs)



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ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	18.1 ± 0.5	18.6 ± 0.5	18.8 ± 0.5	18.8 ± 0.5	18.9 ± 0.5
	Max Gain	dBi	18.6	19.1	19.3	19.3	19.4
Azimuth Beamwidth (3 dB)		degrees	66.4° ± 3.0°	67.3° ± 2.0°	67.6° ± 1.5°	64.8° ± 2.0°	59.4° ± 4.5°
Elevation Beamwidth (3 dB)		degrees	5.2° ± 0.5°	5.0° ± 0.1°	4.5° ± 0.5°	4.0° ± 0.1°	4.0° ± 0.1°
Electrical Downtilt		degrees	2-10°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	24.2	25	24	22	19
First Upper Side Lobe Suppression		dB	22	21	17.1	18.7	16.3
Cross Polar Discrimination Over Sector		dB	13	12	12	11	10
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	18	23	25	26	22
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	18.1 ± 0.5	18.7 ± 0.5	18.9 ± 0.5	18.9 ± 0.3	19.0 ± 1.0
	Max Gain	dBi	18.6	19.2	19.4	19.2	20.0
Azimuth Beamwidth (3 dB)		degrees	66.6° ± 1.5°	67.0° ± 1.8°	67.6° ± 2.0°	65.1° ± 2.1°	59.6° ± 3.8°
Elevation Beamwidth (3 dB)		degrees	5.1° ± 0.5°	5.0° ± 0.1°	4.5° ± 0.5°	4.0° ± 0.1°	4.0° ± 0.1°
Electrical Downtilt		degrees	2-10°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-150				
Front-to-Back Ratio, Total Power, ± 30°		dB	24	24	24	22	20
First Upper Side Lobe Suppression		dB	25	25.2	21	20.3	19.9
Cross Polar Discrimination Over Sector		dB	12.6	12	12	12	10.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19	23	25	26	21
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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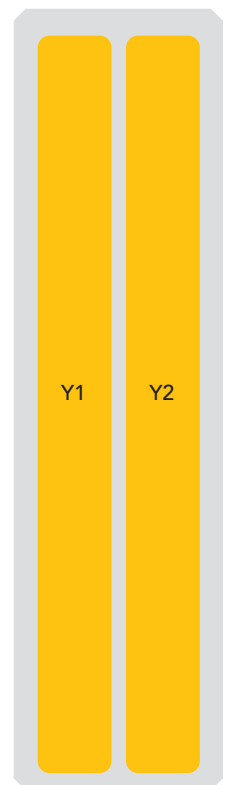
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ Y1	1710-2690 MHz	1-2	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1900 (74.8)
Width		mm (in)	320 (12.6)
Depth		mm (in)	123 (4.8)
Net Weight - Antenna Only		kg (lbs)	18.6 (41)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	821 (185)
	Side	N (lbf)	271 (61)
	Rear	N (lbf)	1066 (240)
Survival Wind Speed		km/h (mph)	200 (124)
Connector Type		--	(4x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color		---	Light Grey RAL7035
Radome Material		---	Fiberglass
Lightning Protection		---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	2180 x 415 x 215 (85.8 x 16.3 x 8.5)
	Shipping Weight	kg (lbs)	27.4 kg (60.4 lbs)

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 50-110 mm (2.0-4.3 in) <i>Shipped with antenna</i>	APM50-B1	4.5 kg (9.9 lbs)

INSTALLATION

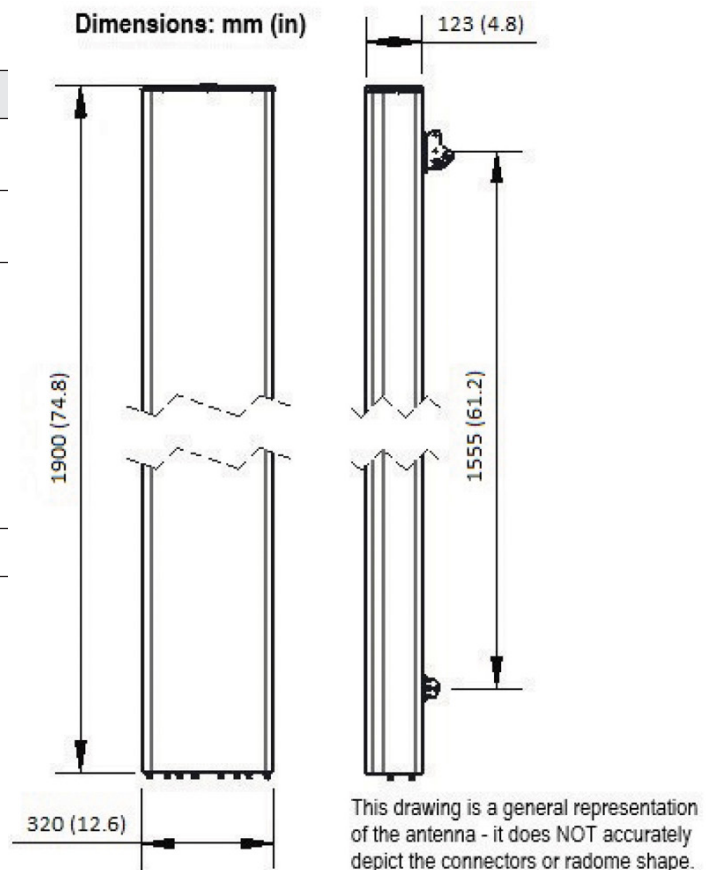
Please read all installation notes before installing product.



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

EXTERNAL DOCUMENT LINKS

[APM50 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](#)