

APXVBL15B_43-C-I20

Features

- 2 ports / 1 cross pol system in low band
- 2 ports / 1 cross pol system in high band
- SRET - Field replaceable / ACU HW Version -2.02
- Compliant with AISG v2.0 and 3GPP



PRODUCT OVERVIEW	Frequency Range (MHz)	698-960	1710-2690
	Array	■ R1	■ Y1
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	65°
	Electrical Downtilt	2-15°	2-11°
	Dimensions	1500 x 350 x 200 mm (59.1 x 13.8 x 7.9 in)	

ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVBL15B_43-C-I20	ACU-I20-B2 Field Replaceable RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	26.7 kg (58.9 lbs)



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ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range		MHz	698-960		
		MHz	698-806	790-896	880-960
Polarization		---	±45°		
Gain	Over all Tilts	dBi	13.8 ± 0.5	14.4 ± 0.5	14.8 ± 0.5
	Max Gain	dBi	14.3	14.9	15.3
Azimuth Beamwidth (3 dB)		degrees	67.8° ± 2.0°	65.4° ± 1.5°	64.9° ± 1.0°
Elevation Beamwidth (3 dB)		degrees	17.8° ± 1.9°	15.7° ± 1.0°	14.6° ± 0.5°
Electrical Downtilt		degrees	2-15°		
Impedance		Ohms	50Ω		
VSWR (Return Loss)		---	1.5:1 (-14 dB)		
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)		
Front-to-Back Ratio, Total Power, ± 30°		dB	25	24	23
First Upper Side Lobe		dB	19.8	18.0	15.0
Cross-Pol Over Sector		dB	11.0	8.8	10.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	22.6	22.1	21.0
Maximum Effective Power Per Port		Watts	350 W		
Cross Polar Isolation		dB	26		
Interband Isolation		dB	26		

ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2200	2300-2400	2500-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	15.7 ± 1.0	16.1 ± 0.6	16.6 ± 0.5	15.9 ± 0.9	16.5 ± 0.7
	Max Gain	dBi	16.7	16.7	17.1	16.8	17.2
Azimuth Beamwidth (3 dB)		degrees	63.3° ± 5.6°	67.8° ± 3.3°	64.5° ± 8.9°	68.3° ± 4.7°	61.4° ± 3.5°
Elevation Beamwidth (3 dB)		degrees	7.3° ± 0.5°	6.7° ± 0.7°	6.2° ± 0.5°	5.7° ± 0.7°	5.2° ± 0.5°
Electrical Downtilt		degrees	2-11°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-150 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	19.9	20.5	22.0	23.6	20.7
First Upper Side Lobe		dB	16.6	18.0	17.0	15.2	13.1
Cross-Pol Over Sector		dB	9.2	9.8	8.3	7.5	5.0
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.7	21.2	21.0	14.2	18.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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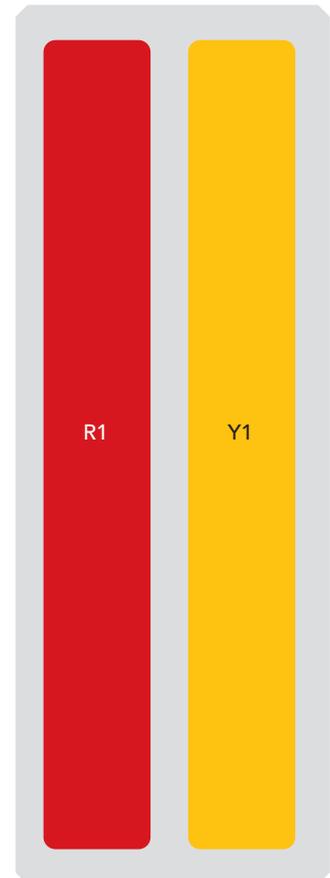
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	698-960 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-R1
■ Y1	1710-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1500 (59.1)
Width		mm (in)	350 (13.8)
Depth		mm (in)	200 (7.9)
Net Weight - Antenna Only		kg (lbs)	16.2 (35.7)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	683 (154)
	Side	N (lbf)	331 (74)
	Rear	N (lbf)	789 (177)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
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		---	DC Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in)	1750 x 445 x 295 (68.9 x 17.5 x 11.6)
	Shipping Weight	kg (lbs)	26.7 (58.9)

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>Refer to ordering options</i>	APM50-B1	4.5 kg (9.9 lbs)

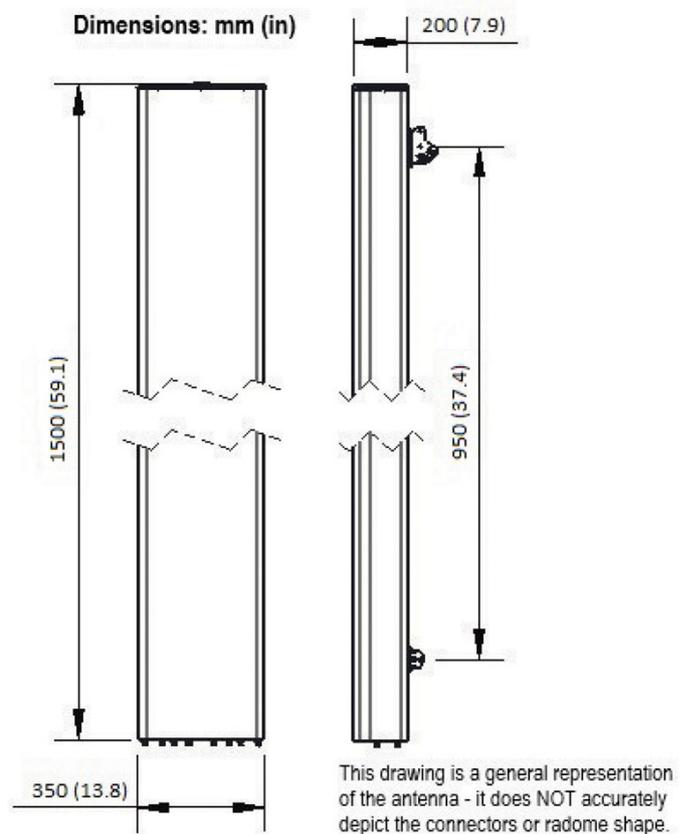
INSTALLATION

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](#)