

## APXVLL15B\_43-C-I20

### Features

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



<b>PRODUCT OVERVIEW</b>	Frequency Range (MHz)	(2x) 1710-2690	
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Electrical Downtilt	2-12°	
Dimensions	1495 x 320 x 123 mm (58.9 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
APXVLL15B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	22.7 kg (50 lbs)



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## APXVLL15B\_43-C-I20

### ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.9 ± 0.4	17.3 ± 0.3	17.5 ± 0.3	17.7 ± 0.4	18.0 ± 0.5
	Max Gain	dBi	17.3	17.6	17.8	18.1	18.5
Azimuth Beamwidth (3 dB)		degrees	69.2° ± 3.5°	70.5° ± 4.1°	70.6° ± 2.7°	67.7° ± 1.9°	61.9° ± 4.3°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.4°	6.2° ± 0.3°	5.9° ± 0.4°	5.3° ± 0.2°	4.8° ± 0.3°
Electrical Downtilt		degrees	2-12°				
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	22.4	22.8	23.1	23.3	21.4
First Upper Side Lobe Suppression		dB	18.6	18.7	18.7	18.2	15.9
Cross Polar Discrimination Over Sector		dB	9.3	11.1	11.9	12.4	9.8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	16.5	18.5	19.1	22.1	24.0
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28	28	28	28	28
Interband Isolation		dB	28	28	28	28	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	16.9 ± 0.4	17.3 ± 0.3	17.5 ± 0.3	17.7 ± 0.4	18.1 ± 0.4
	Max Gain	dBi	17.3	17.6	17.8	18.1	18.5
Azimuth Beamwidth (3 dB)		degrees	69.1° ± 2.8°	70.2° ± 3.7°	70.4° ± 2.5°	67.9° ± 1.6°	61.3° ± 4.1°
Elevation Beamwidth (3 dB)		degrees	6.8° ± 0.4°	6.2° ± 0.3°	5.9° ± 0.4°	5.2° ± 0.2°	4.8° ± 0.3°
Electrical Downtilt		degrees	2-12°				
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	22.9	22.6	22.7	23.0	20.2
First Upper Side Lobe Suppression		dB	18.4	18.8	19.0	19.4	17.1
Cross Polar Discrimination Over Sector		dB	10.5	11.2	12.1	12.0	10.5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.6	17.0	17.6	19.7	22.2
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28	28	28	28	28
Interband Isolation		dB	28	28	28	28	28

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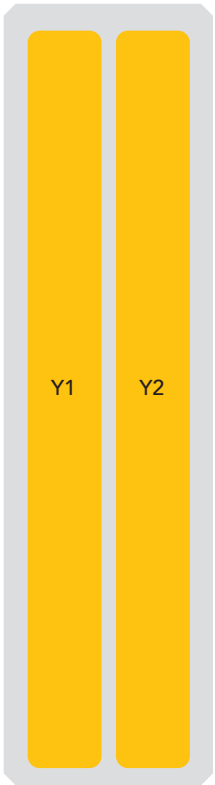
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## BOTTOM VIEW - LABELING



### ARRAY LAYOUT

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



The illustration is not shown to scale.

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## APXVLL15B\_43-C-I20

### MECHANICAL SPECIFICATIONS

Length	mm (in)	1495 (58.9)
Width	mm (in)	320 (12.6)
Depth	mm (in)	123 (4.8)
Net Weight - Antenna Only	kg (lbs)	15.3 (33.7)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 588 (132)
	Side	N (lbf) 226 (51)
	Rear	N (lbf) 700 (157)
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	---	Direct Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 1766 x 445 x 210 (69.5 x 17.5 x 8.3)
	Shipping Weight	kg (lbs) 22.7 (50)

### 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

## APXVLL15B\_43-C-I20

**ACCESSORIES** Accessories may be ordered separately unless otherwise indicated.

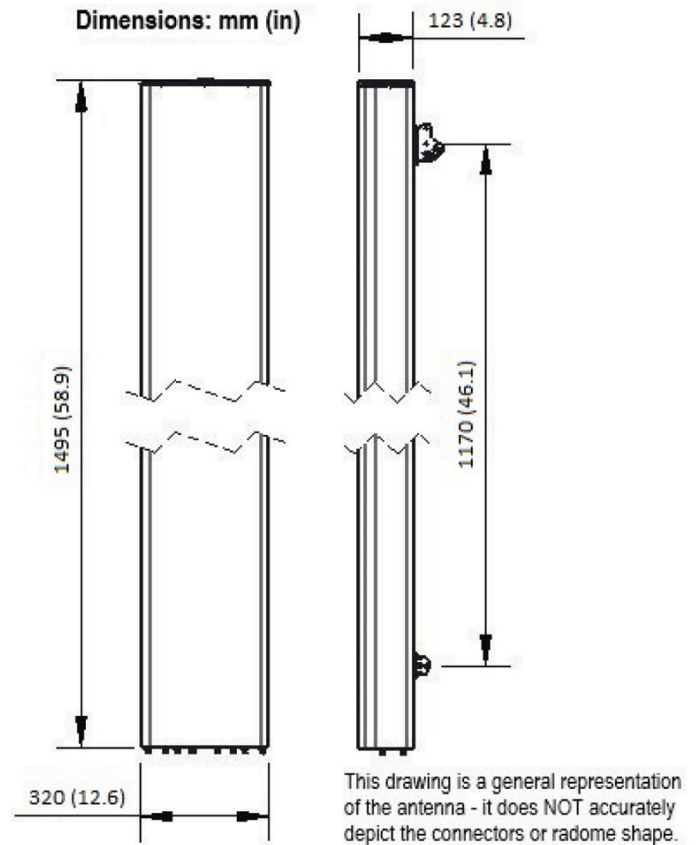
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Shipped with antenna</i>	APM50-B1	4.5 kg (9.9 lbs)

**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](#)