

## APXVLL15V\_43-C-I20

### Features

- 4 ports / 2 cross pol systems in high band (1710-2690 MHz)
- Supporting 4x4 MIMO
- 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	0-10°	
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
APXVLL15V_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	24.4 kg (53.8 lbs)



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## APXVLL15V\_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	17.1 ± 0.3	17.3 ± 0.2	17.4 ± 0.3	17.7 ± 0.4	17.9 ± 0.4
	Max Gain	dBi	17.4	17.5	17.7	18.1	18.3
Azimuth Beamwidth (3 dB)		degrees	67.5° ± 3.5°	69.6° ± 3.7°	71.0° ± 2.9°	66.4° ± 1.6°	60.4° ± 3.3°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.3°	6.1° ± 0.3°	5.7° ± 0.5°	5.0° ± 0.2°	4.6° ± 0.2°
Electrical Downtilt		degrees	0-10°				
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	24.8	24.1	24.1	24.8	21.0
First Upper Side Lobe Suppression		dB	17.1	16.4	16.2	16.9	16.4
Cross Polar Discrimination Over Sector		dB	15.1	14.9	15.0	14.0	12.3
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	18.7	22.1	22.3	23.1	26.0
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

### ELECTRICAL SPECIFICATIONS

■ Y2

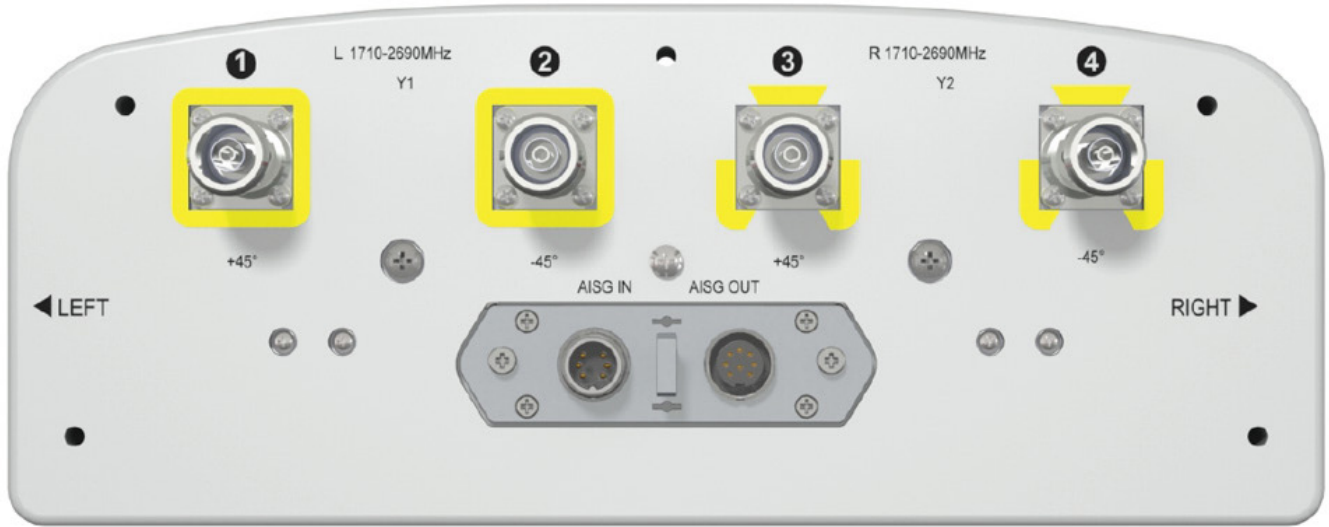
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.7 ± 0.6	17.0 ± 0.5	17.1 ± 0.5	17.4 ± 0.6	17.5 ± 0.6
	Max Gain	dBi	17.3	17.5	17.6	18.0	18.1
Azimuth Beamwidth (3 dB)		degrees	67.1° ± 3.8°	70.0° ± 4.3°	71.7° ± 3.0°	66.4° ± 1.7°	60.2° ± 3.6°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.3°	6.0° ± 0.4°	5.6° ± 0.4°	5.0° ± 0.2°	4.6° ± 0.3°
Electrical Downtilt		degrees	0-10°				
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	25.0	24.6	24.3	24.6	21.9
First Upper Side Lobe Suppression		dB	16.9	15.8	16.1	17.7	15.7
Cross Polar Discrimination Over Sector		dB	14.1	14.1	13.8	14.4	11.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	17.5	21.0	20.7	22.2	23.7
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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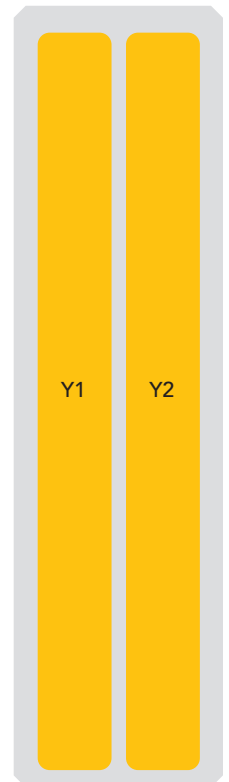
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## BOTTOM VIEW - LABELING



### 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)	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) 1770 x 445 x 245 (69.7 x 17.5 x 9.6)
	Shipping Weight	kg (lbs) 24.4 kg (53.8 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

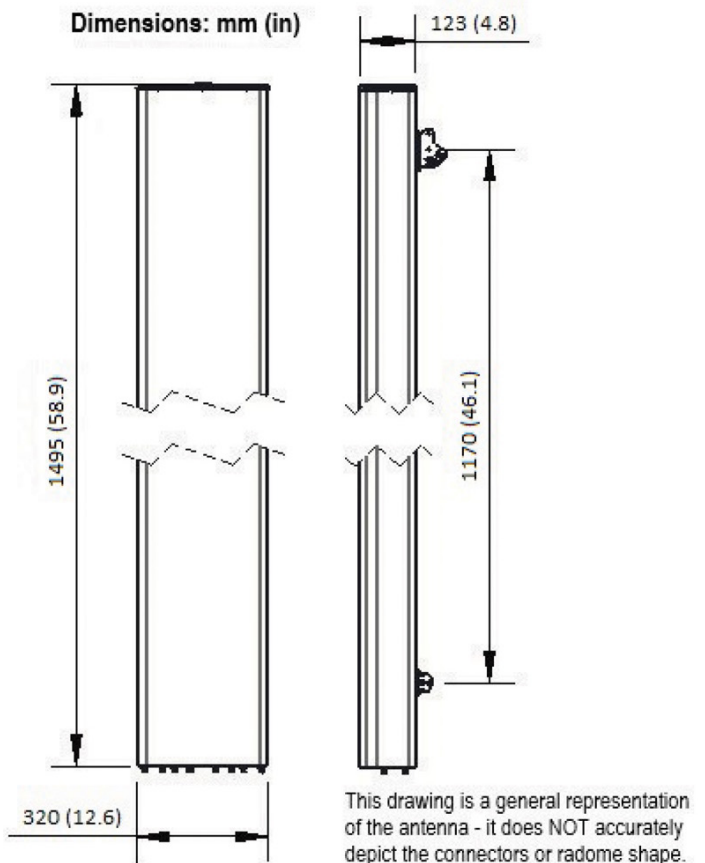
Please read all installation notes before installing product.



- 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](#)