

APXVLLL15B_43-C-I20

Features

- 6 ports / 3 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



PRODUCT OVERVIEW	Frequency Range (MHz)	(3x) 1710-2690		
	Array	■ Y1	■ Y2	■ Y3
	Connector	1-2	3-4	5-6
		6 PORTS		
	Polarization	XPOL		
	Azimuth Beamwidth (avg)	65°		
	Electrical Downtilt	2-12°		
	Dimensions	1485 x 428 x 145 mm (58.5 x 16.9 x 5.7 in)		

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXVLLL15B_43-C-I20	ACU-I20-B3 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	30.2 kg (66.6 lbs)



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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 ± 0.5	17.5 ± 0.3	18.1 ± 0.6	18.2 ± 0.5	17.7 ± 0.9
	Max Gain	dBi	17.6	17.8	18.7	18.7	18.6
Azimuth Beamwidth (3 dB)		degrees	64.2° ± 3.7°	63.5° ± 5.3°	65.4° ± 5.0°	64.6° ± 4.5°	60.8° ± 6.3°
Elevation Beamwidth (3 dB)		degrees	6.9° ± 0.5°	6.4° ± 0.4°	5.8° ± 0.5°	5.2° ± 0.4°	4.9° ± 0.4°
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	24.3	26.1	25.6	21.6	19.9
First Upper Side Lobe Suppression		dB	19.4	19.4	19.0	18.2	14.9
Cross Polar Discrimination Over Sector		dB	17.0	15.7	13.5	12.6	13.6
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	18.7	21.3	20.7	17.8	22.6
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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	17.3 ± 0.5	17.7 ± 0.3	18.3 ± 0.5	18.1 ± 0.5	18.2 ± 0.7
	Max Gain	dBi	17.8	18.0	18.8	18.6	18.9
Azimuth Beamwidth (3 dB)		degrees	60.2° ± 5.0°	56.3° ± 2.5°	58.6° ± 4.9°	66.8° ± 2.9°	58.7° ± 5.2°
Elevation Beamwidth (3 dB)		degrees	6.9° ± 0.5°	6.4° ± 0.3°	5.9° ± 0.5°	5.3° ± 0.4°	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	25.5	25.9	25.0	22.2	19.8
First Upper Side Lobe Suppression		dB	20.5	20.0	18.1	19.5	15.2
Cross Polar Discrimination Over Sector		dB	15.5	13.9	12.6	12.3	11.4
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	17.1	18.9	20.6	19.5	21.1
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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ELECTRICAL SPECIFICATIONS

Y3

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 ± 0.5	17.5 ± 0.3	18.2 ± 0.6	18.1 ± 0.6	17.7 ± 0.9
	Max Gain	dBi	17.6	17.8	18.8	18.7	18.6
Azimuth Beamwidth (3 dB)		degrees	64.2° ± 4.2°	63.5° ± 5.3°	65.4° ± 5.1°	66.2° ± 3.3°	61.4° ± 5.6°
Elevation Beamwidth (3 dB)		degrees	6.9° ± 0.5°	6.4° ± 0.3°	5.9° ± 0.5°	5.3° ± 0.3°	4.9° ± 0.4°
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	24.4	24.7	25.5	22.5	21.5
First Upper Side Lobe Suppression		dB	19.8	19.4	17.9	17.2	14.3
Cross Polar Discrimination Over Sector		dB	14.5	13.7	12.6	11.3	12.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	18.3	21.2	22.7	21.7	20.9
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

Specifications follow BASTA guidelines.

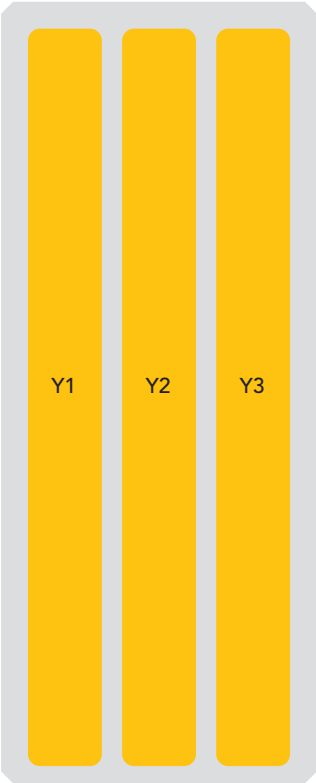
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BOTTOM VIEW - LABELING



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
■ Y3	1710-2690 MHz	5-6	(2x) 4.3-10 Female	Y3	RFxxxxxxxxxx-Y3



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length		mm (in)	1485 (58.5)
Width		mm (in)	428 (16.9)
Depth		mm (in)	145 (5.7)
Net Weight - Antenna Only		kg (lbs)	21 (46.3)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	783 (176)
	Side	N (lbf)	265 (60)
	Rear	N (lbf)	822 (185)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
Connector Type		--	(6x) 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)	1755 x 523 x 240 (69.1 x 20.6 x 9.4)
	Shipping Weight	kg (lbs)	30.2 (66.6)

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 50-110 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.

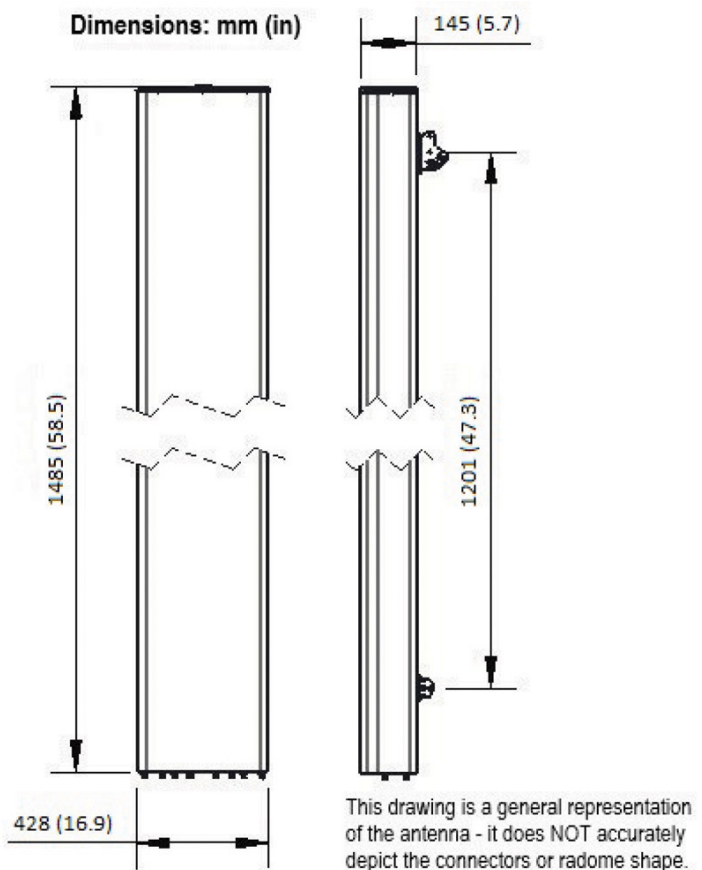


Always attach the antenna using all mounting points.

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](#)