

APXV3LL15B_43-C-I20

Features

- Single beam antenna, 33°
- 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)	33°	
	Electrical Downtilt	2-12°	
Dimensions	1495 x 499 x 199 mm (58.9 x 19.6 x 7.8 in)		

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXV3LL15B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	31.5 kg (69.4 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	20.0 ± 1.0	20.8 ± 0.5	21.0 ± 0.1	21.0 ± 0.1	21.6 ± 0.5
	Max Gain	dBi	21.0	21.3	21.1	21.1	22.1
Azimuth Beamwidth (3 dB)		degrees	37.8° ± 2.5°	32.9° ± 2.0°	29.8° ± 3.5°	25.7° ± 0.8°	25.9° ± 2.0°
Elevation Beamwidth (3 dB)		degrees	6.6° ± 0.5°	6.0° ± 0.1°	5.8° ± 0.5°	5.0° ± 0.1°	4.7° ± 0.5°
Electrical Downtilt		degrees	2-12°				
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	27	28	27	24	24
First Upper Side Lobe		dB	18	19	18.3	15.9	16
Cross-Pol Over Sector		dB	8	10	11	8	2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	21	23	23	21.7	18.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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	19.9 ± 1.0	20.8 ± 0.5	21.0 ± 0.2	21.0 ± 0.1	21.6 ± 0.5
	Max Gain	dBi	20.9	21.3	21.2	21.1	22.1
Azimuth Beamwidth (3 dB)		degrees	37.8° ± 2.5°	32.9° ± 2.0°	29.8° ± 3.5°	25.9° ± 1.0°	25.9° ± 2.0°
Elevation Beamwidth (3 dB)		degrees	6.7° ± 0.5°	6.0° ± 0.1°	5.9° ± 0.5°	5.0° ± 0.1°	4.8° ± 0.5°
Electrical Downtilt		degrees	2-12°				
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	27	28	28	26	23
First Upper Side Lobe		dB	19	19	19	20	18
Cross-Pol Over Sector		dB	10	10	10	9	5
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20	21	20	20	18
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

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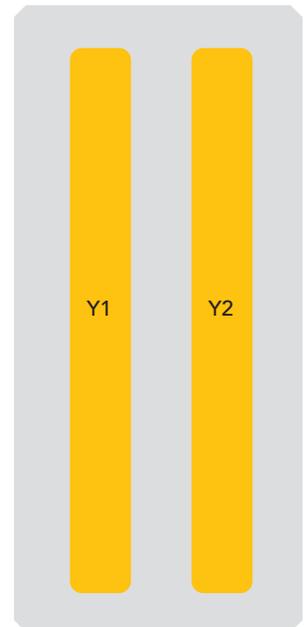
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BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ 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		



The illustration is not shown to scale.

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MECHANICAL SPECIFICATIONS

Length	mm (in)	1495 (58.9)
Width	mm (in)	499 (19.6)
Depth	mm (in)	199 (7.8)
Net Weight - Antenna Only	kg (lbs)	21.7 (47.8)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 918 (206)
	Side	N (lbf) 314 (71)
	Rear	N (lbf) 1024 (230)
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
Shipping	Packing Size (Length x Width x Depth)	mm (in) 1745 x 595 x 295 (68.7 x 23.4 x 11.6)
	Shipping Weight	kg (lbs) 31.5 (69.4)

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)

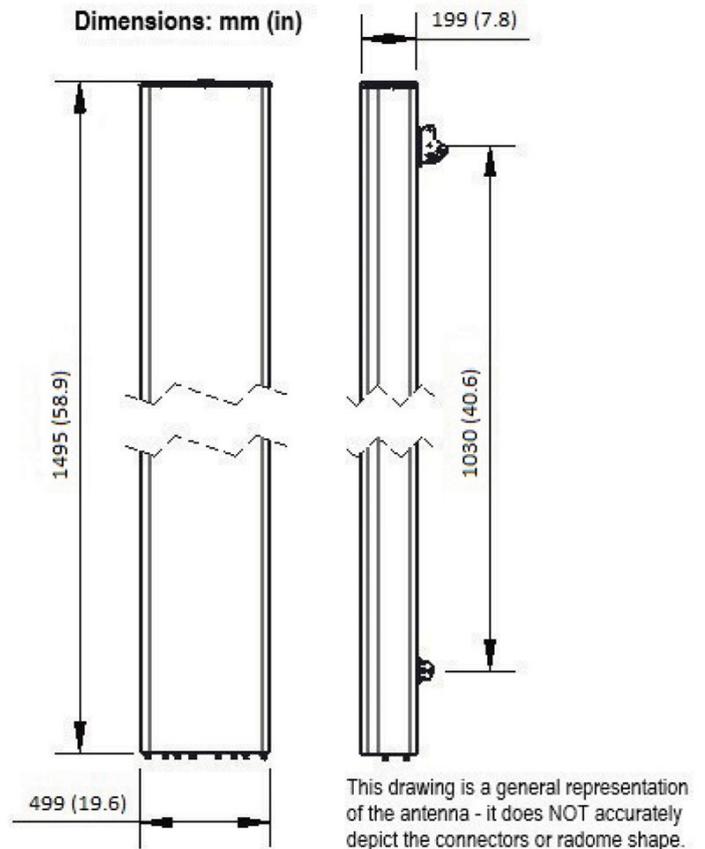
INSTALLATION Please read all installation notes before installing product.



- 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](#)

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