

APXV3LL08B_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	2-11°	
	Dimensions	750 x 320 x 123 mm (29.5 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
APXV3LL08B_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-B1 Beam Tilt Kit Included	50-110 mm (2.0-4.3 in)	16.4 kg (36.2 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	14.4 ± 0.3	14.8 ± 0.2	15 ± 0.3	15.5 ± 0.5	15.6 ± 0.5
	Max Gain	dBi	14.7	15	15.3	16	16.1
Azimuth Beamwidth (3 dB)		degrees	35.5° ± 1.5°	33.6° ± 0.8°	32° ± 1.9°	28° ± 0.7°	26.9° ± 0.9°
Elevation Beamwidth (3 dB)		degrees	28.3° ± 1.6°	26.5° ± 1.5°	24.6° ± 2.3°	21° ± 1.2°	18.5° ± 1.3°
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	24.4	23.6	21.9	20.5	19.4
First Upper Side Lobe		dB	14.9	14.3	12.9	12.4	11.2
Cross-Pol Over Sector		dB	10.9	8.3	7.8	3.5	3.2
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	15.8	17	17.4	16.6	21.3
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	14.5 ± 0.3	14.9 ± 0.3	15.1 ± 0.4	15.8 ± 0.3	15.5 ± 0.7
	Max Gain	dBi	14.8	15.2	15.5	16.1	16.2
Azimuth Beamwidth (3 dB)		degrees	35.1° ± 1.2°	33.3° ± 1°	31.5° ± 2.1°	28° ± 0.7°	27.3° ± 1.1°
Elevation Beamwidth (3 dB)		degrees	28.7° ± 1°	27° ± 1°	25.4° ± 1.9°	20.8° ± 1.1°	19.5° ± 1.6°
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	24.5	22.2	21.5	20.9	20.2
First Upper Side Lobe		dB	18.9	16.9	16.6	17.1	15.2
Cross-Pol Over Sector		dB	10.3	9.2	8.9	7	6.3
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	19.5	20.6	21.2	22.1	22.2
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	26				
Interband Isolation		dB	26				

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

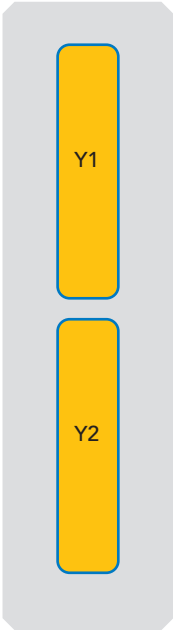
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BOTTOM VIEW - LABELING



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)	750 (29.5)
Width		mm (in)	320 (12.6)
Depth		mm (in)	123 (4.8)
Net Weight - Antenna Only		kg (lbs)	8.3 (18.3)
Net Weight - Mounting Hardware Only		kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	295 (66)
	Side	N (lbf)	97 (22)
	Rear	N (lbf)	311 (70)
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)	1025 x 415 x 215 (40.4 x 16.3 x 8.5)
	Shipping Weight	kg (lbs)	16.4 (36.2)

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)

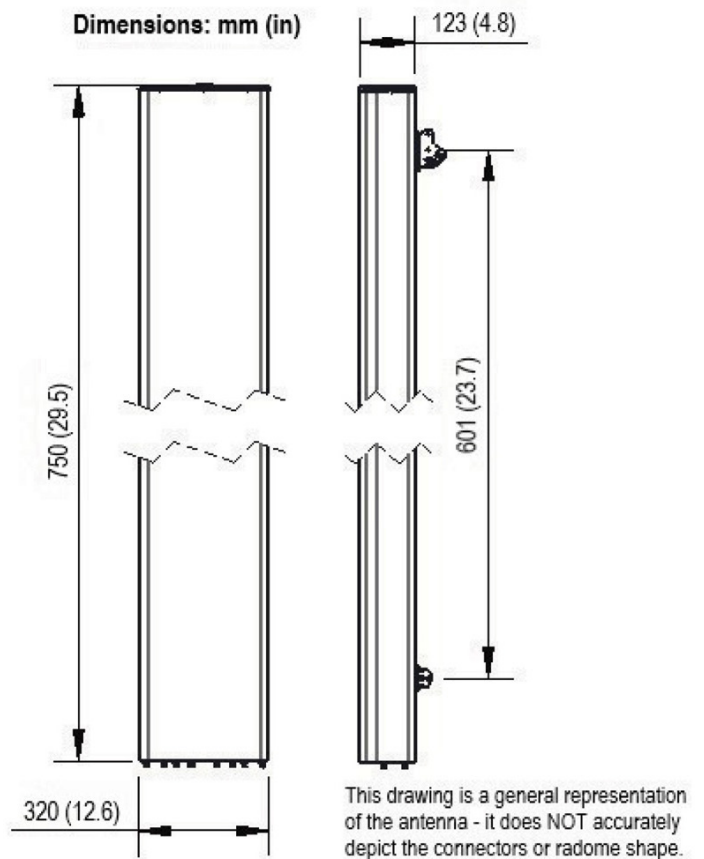
INSTALLATION

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](#)