

APXV3LL09AS_43-C-I20

Features

- Twin 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	920 x 396 x 160 mm (36.2 x 15.6 x 6.3 in)		

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
APXV3LL09AS_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-W3 Included	50-115 mm (2.0-4.5 in)	25.8 kg (56.9 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	17.7 ± 0.2	18 ± 0.4	17.9 ± 0.7	18.6 ± 0.4
	Max Gain	dBi	17.6	17.9	18.4	18.6	19
Azimuth Beamwidth (3 dB)		degrees	40.1° ± 2.2°	37.4° ± 1.2°	35.2° ± 2.7°	31.6° ± 0.8°	28.8° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	11.9° ± 0.7°	11.1° ± 0.3°	10.5° ± 0.7°	9.3° ± 0.2°	8.4° ± 0.5°
Beam Center		degrees	±27°				
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	22.9	24.1	24	22.1	22.3
First Upper Side Lobe Suppression		dB	19.7	21.1	21.6	21.1	18.3
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				
Beam Isolation		dB	30				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

■ Y2

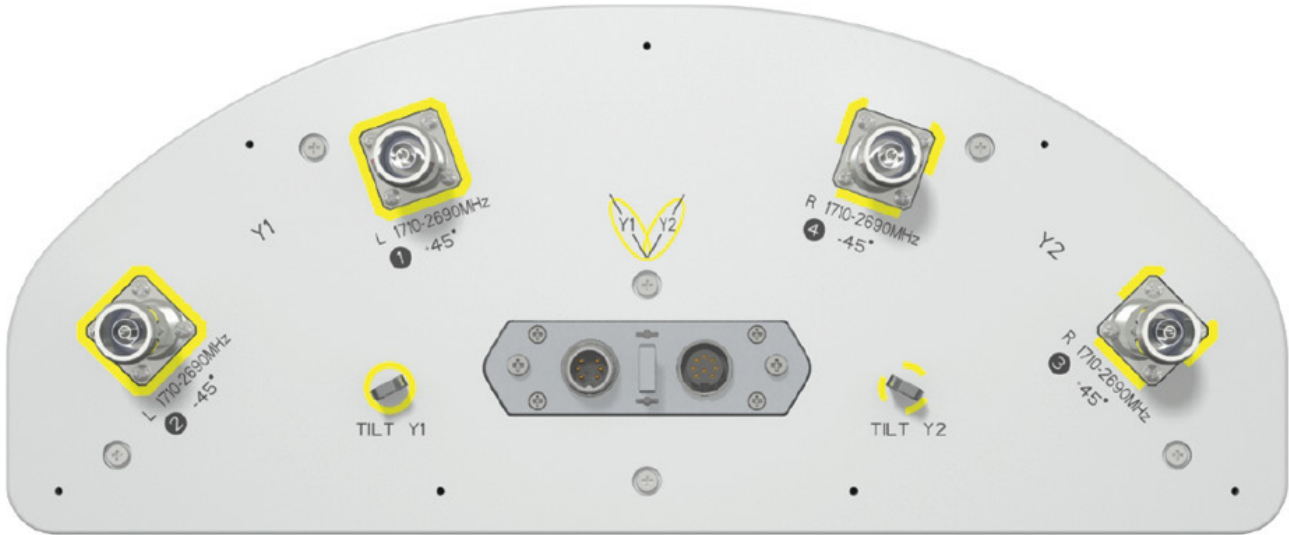
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.1 ± 0.4	17.6 ± 0.2	17.9 ± 0.4	17.9 ± 0.6	18.6 ± 0.4
	Max Gain	dBi	17.5	17.8	18.3	18.5	19
Azimuth Beamwidth (3 dB)		degrees	40° ± 1.8°	37.3° ± 1.9°	35.1° ± 2.6°	31.5° ± 0.8°	29.1° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	12° ± 0.7°	11.1° ± 0.4°	10.5° ± 0.8°	9.3° ± 0.2°	8.3° ± 0.5°
Beam Center		degrees	±27°				
Electrical Downtilt		degrees	2-12°				
Impedance		Ohms	50Ω				
VSWR (Return Loss)		---	1.5:1 (-14 dB)				
Passive Intermodulation		dBc	-153 (3rd Order for 2x20 W Carriers)				
Front-to-Back Ratio, Total Power, ± 30°		dB	22.6	23.1	23	21.4	21.8
First Upper Side Lobe Suppression		dB	20.6	21.8	20.6	20.6	17.3
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				
Beam Isolation		dB	30				

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BOTTOM VIEW - LABELING

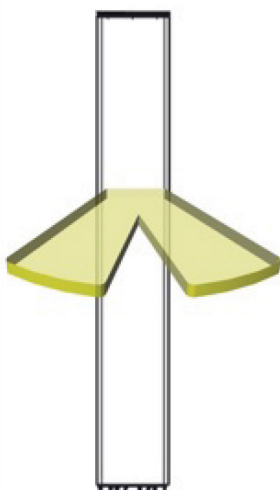


ARRAY LAYOUT

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)	920 (36.2)
Width	mm (in)	396 (15.6)
Depth	mm (in)	160 (6.3)
Net Weight - Antenna Only	kg (lbs)	16 (35.3)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 317 (71)
	Side	N (lbf) 159 (36)
	Rear	N (lbf) 444 (100)
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) 1242 x 520 x 294 (48.9 x 20.5 x 11.6)
	Shipping Weight	kg (lbs) 25.8 (56.9)

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 50-115 mm (2.0-4.5 in) <i>Shipped with antenna</i>	APM50-W3	4.5 kg (9.9 lbs)

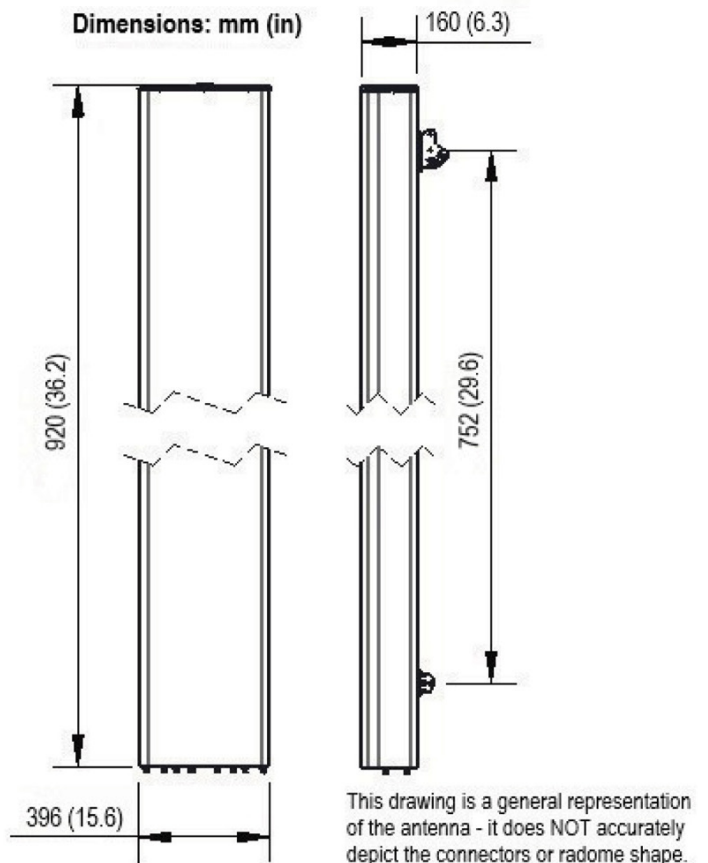
INSTALLATION Please read all installation notes before installing product.



- 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](#)