

APXV34L20AS_43-C-I20

Features

- Twin beam antenna with 2 ports 33° + 2 ports 33° main beam directions 60° apart
- Each beam 2 ports / 1 cross pol system 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)	(4x) 1710-2690			
	Array	■ Y1	■ Y2	■ Y3	■ Y4
	Connector	1-2	3-4	5-6	7-8
		8 PORTS			
	Polarization	XPOL			
	Azimuth Beamwidth (avg)	33°			
	Electrical Downtilt	2-12°			
	Dimensions	1900 x 396 x 160 mm (74.8 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
APXV34L20AS_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-W5 Included	50-115 mm (2.0-4.5 in)	37 kg (81.6 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	17.6 ± 0.6	17.9 ± 0.2	18 ± 0.6	17.8 ± 0.4	18.4 ± 0.4
	Max Gain	dBi	18.2	18.1	18.6	18.2	18.8
Azimuth Beamwidth (3 dB)		degrees	39.9° ± 2.2°	37° ± 1.6°	34.7° ± 2.8°	31.7° ± 1.3°	28.8° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	11.2° ± 0.8°	10.1° ± 0.6°	9.5° ± 1.1°	8.5° ± 0.4°	7.5° ± 0.4°
Beam Center		degrees	-28.3° ± 1°	-28.1° ± 0.6°	-27.9° ± 0.9°	-28° ± 0.5°	-28.2° ± 0.6°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	20.8	19.9	20.1	19.8	20.3
First Upper Side Lobe Suppression		dB	19.2	19.7	20.6	19.7	18.2
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam 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	17.4 ± 0.4	17.5 ± 0.3	17.5 ± 0.6	17.5 ± 0.4	18 ± 0.5
	Max Gain	dBi	17.8	17.8	18.1	17.9	18.5
Azimuth Beamwidth (3 dB)		degrees	40° ± 2.3°	36.9° ± 1.6°	34.9° ± 2.3°	31.6° ± 1.1°	28.8° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	10.9° ± 0.6°	10.1° ± 0.3°	9.5° ± 0.7°	8.3° ± 0.4°	7.4° ± 0.8°
Beam Center		degrees	-28.8° ± 1°	-28.4° ± 0.6°	-28.2° ± 0.8°	-28.3° ± 0.5°	-28.3° ± 0.5°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.5	20.1	19.2	20.6	20.8
First Upper Side Lobe Suppression		dB	17.6	17.7	18.5	18.4	16.8
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

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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	17.4 ± 0.4	17.5 ± 0.3	17.6 ± 0.5	17.5 ± 0.4	18 ± 0.6
	Max Gain	dBi	17.8	17.8	18.1	17.9	18.6
Azimuth Beamwidth (3 dB)		degrees	40.1° ± 2.3°	36.9° ± 1.3°	34.8° ± 2.6°	31.5° ± 1.1°	28.7° ± 1.6°
Elevation Beamwidth (3 dB)		degrees	11° ± 0.6°	10.1° ± 0.3°	9.5° ± 0.7°	8.3° ± 0.5°	7.4° ± 0.8°
Beam Center		degrees	27.3° ± 0.6°	27° ± 0.5°	26.7° ± 0.8°	26.7° ± 0.5°	27° ± 0.6°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.8	20.5	20.2	21.8	21.4
First Upper Side Lobe Suppression		dB	18.6	18.8	18.9	21.2	18.1
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

Specifications follow BASTA guidelines.

ELECTRICAL SPECIFICATIONS

Y4

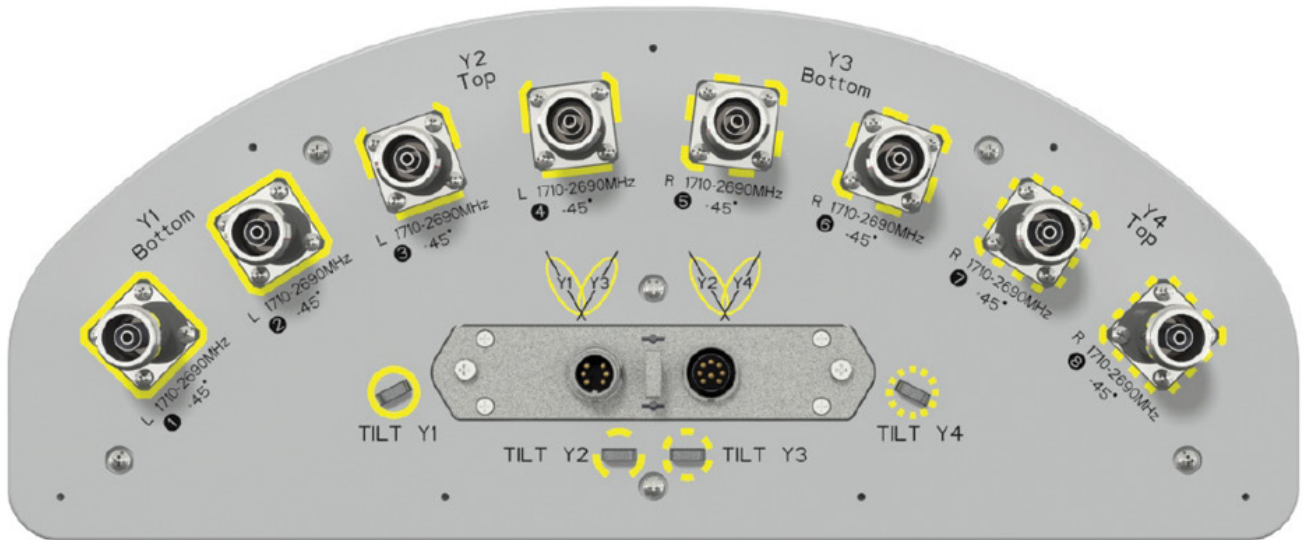
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	17.8 ± 0.5	18.1 ± 0.2	18.2 ± 0.7	18.1 ± 0.3	18.6 ± 0.6
	Max Gain	dBi	18.3	18.3	18.9	18.4	19.2
Azimuth Beamwidth (3 dB)		degrees	39.9° ± 2.7°	37° ± 1.8°	34.7° ± 3.1°	31.5° ± 1.3°	28.7° ± 1.5°
Elevation Beamwidth (3 dB)		degrees	11.2° ± 0.8°	10.1° ± 0.6°	9.5° ± 1°	8.5° ± 0.3°	7.5° ± 0.4°
Beam Center		degrees	26.9° ± 0.6°	26.6° ± 0.4°	26.2° ± 1.1°	26.2° ± 0.5°	26.6° ± 0.7°
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	-153				
Front-to-Back Ratio, Total Power, ± 30°		dB	21.2	20.6	20.9	21.4	21.6
First Upper Side Lobe Suppression		dB	18.5	19.6	20.9	21	18.5
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

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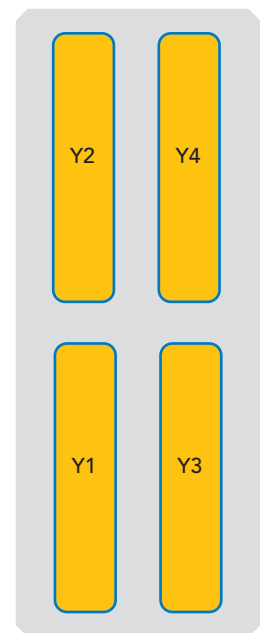
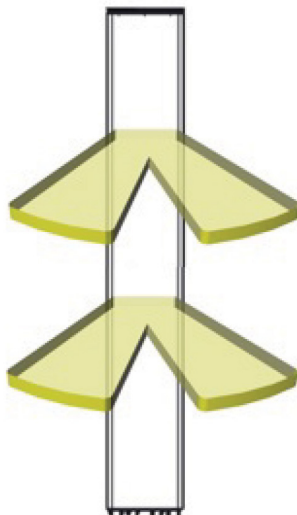
APXV34L20AS_43-C-I20

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
Y4	1710-2690 MHz	7-8	(2x) 4.3-10 Female	Y4	RFxxxxxxxxxx-Y4



The illustration is not shown to scale.

APXV34L20AS_43-C-I20

MECHANICAL SPECIFICATIONS

Length		mm (in)	1900 (74.8)
Width		mm (in)	396 (15.6)
Depth		mm (in)	160 (6.3)
Net Weight - Antenna Only		kg (lbs)	25 (55.1)
Net Weight - Mounting Hardware Only		kg (lbs)	7 (15.4)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	654 (147)
	Side	N (lbf)	327 (74)
	Rear	N (lbf)	918 (206)
Survival Wind Speed / Rated Wind Speed		km/h (mph)	200 (150)
Connector Type		--	(8x) 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)	2190 x 520 x 294 (86.2 x 20.5 x 11.6)
	Shipping Weight	kg (lbs)	37 (81.6)

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 50-115 mm (2.0-4.5 in) <i>Shipped with antenna</i>	APM50-W5	7 kg (15.4 lbs)

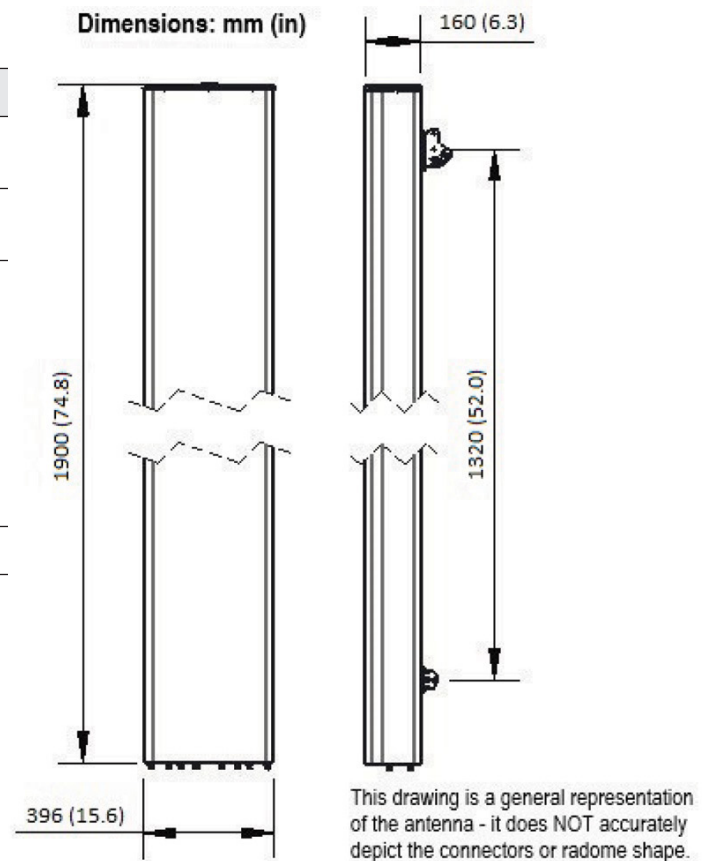
INSTALLATION

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](#)