

## APXV34L24AV\_43-C-I20

### Features

- Twin beam antenna
- 8 ports / 4 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)	(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	0-10°			
	Dimensions	2690 x 396 x 160 mm (105.9 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
APXV34L24AV_43-C-I20	ACU-I20-B4 Internal RET Included	APM50-W5 Included	50-115 mm (2.0-4.5 in)	49.2 kg (108.5 lbs)

## APXV34L24AV\_43-C-I20

### 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	18.4 ± 0.9	18.9 ± 0.6	19.1 ± 1.1	18.5 ± 1.1	18.6 ± 1
	Max Gain	dBi	19.3	19.5	20.2	19.6	19.6
Azimuth Beamwidth (3 dB)		degrees	40.6° ± 2.5°	37.1° ± 1.5°	34.8° ± 2.6°	31.7° ± 1°	29° ± 1.3°
Elevation Beamwidth (3 dB)		degrees	7.6° ± 0.6°	7.1° ± 0.5°	6.7° ± 0.9°	5.8° ± 0.7°	5.4° ± 0.7°
Electrical Downtilt		degrees	0-10°				
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	21.1	21.9	21.3	21.4	21.4
First Upper Side Lobe Suppression		dB	13.9	14.4	14.9	15.6	17.2
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	17.9 ± 0.9	18.3 ± 0.7	18.3 ± 1	17.8 ± 1.1	18.1 ± 1
	Max Gain	dBi	18.8	19	19.3	18.9	19.1
Azimuth Beamwidth (3 dB)		degrees	40.5° ± 2.2°	36.9° ± 1.2°	34.7° ± 2.3°	31.6° ± 1.1°	29.2° ± 0.9°
Elevation Beamwidth (3 dB)		degrees	7.6° ± 0.7°	7.1° ± 0.6°	6.7° ± 0.9°	5.7° ± 0.5°	5.4° ± 0.7°
Electrical Downtilt		degrees	0-10°				
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	20.9	20.9	20.9	21.4	21.3
First Upper Side Lobe Suppression		dB	14.7	15.2	15.8	17.1	17.9
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

Specifications follow BASTA guidelines.

## APXV34L24AV\_43-C-I20

### 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	18 ± 0.9	18.3 ± 0.7	18.3 ± 1.1	17.9 ± 1.1	18.1 ± 1.1
	Max Gain	dBi	18.9	19	19.4	19	19.2
Azimuth Beamwidth (3 dB)		degrees	40.2° ± 2.2°	36.8° ± 1.5°	34.6° ± 2.3°	31.6° ± 1.2°	28.9° ± 1.2°
Elevation Beamwidth (3 dB)		degrees	7.6° ± 0.5°	7.1° ± 0.5°	6.7° ± 0.8°	5.7° ± 0.5°	5.4° ± 0.7°
Electrical Downtilt		degrees	0-10°				
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	21.7	21.7	21.7	20.8	21.5
First Upper Side Lobe Suppression		dB	14.5	14.6	15.4	16.7	17.7
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

Specifications follow BASTA guidelines.

### ELECTRICAL SPECIFICATIONS

Y4

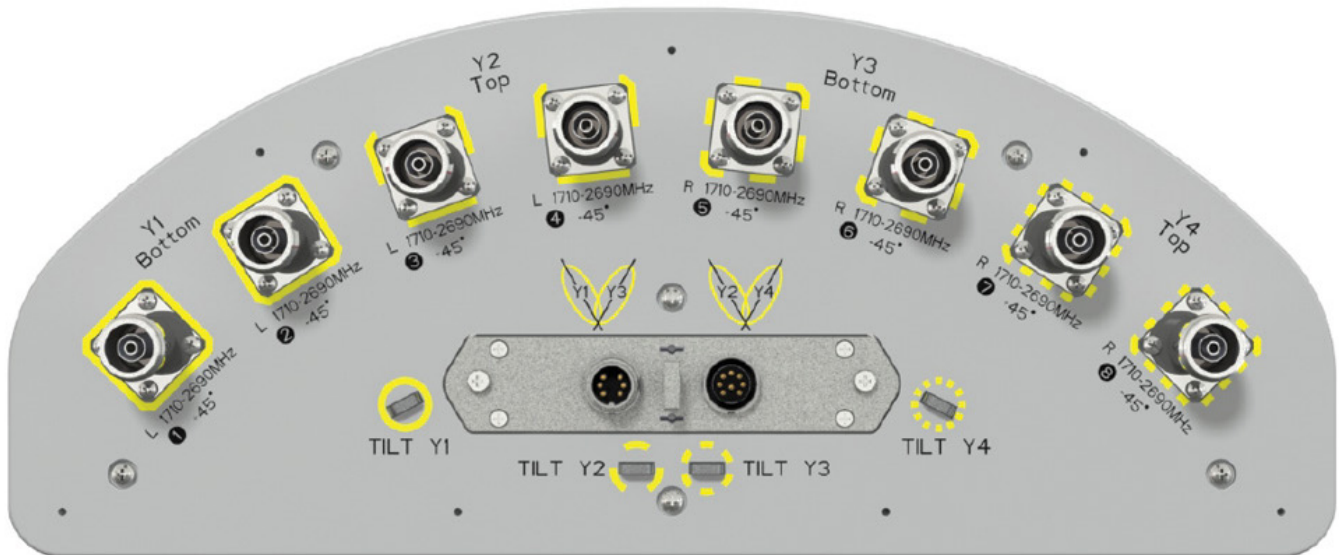
Frequency Range		MHz	1710-2690				
		MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	18.5 ± 0.9	19 ± 0.7	19.2 ± 1.1	18.7 ± 1.3	18.7 ± 1.1
	Max Gain	dBi	19.4	19.7	20.3	20	19.8
Azimuth Beamwidth (3 dB)		degrees	40.4° ± 2.2°	37° ± 1.4°	34.6° ± 2.8°	31.6° ± 1.3°	28.9° ± 1.5°
Elevation Beamwidth (3 dB)		degrees	7.6° ± 0.6°	7.1° ± 0.5°	6.7° ± 0.8°	5.8° ± 0.6°	5.4° ± 0.7°
Electrical Downtilt		degrees	0-10°				
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	21.4	21.4	21.9	22.4
First Upper Side Lobe Suppression		dB	14.8	14.7	15.3	16.6	17
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Beam Isolation		dB	28				

Specifications follow BASTA guidelines.

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.

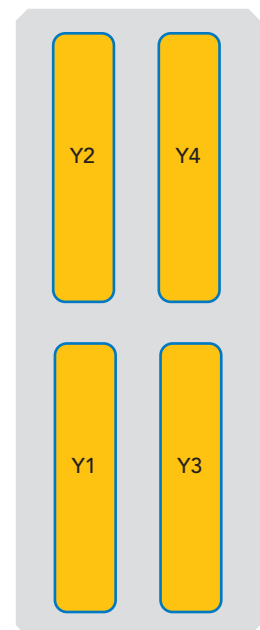
## APXV34L24AV\_43-C-I20

### 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.

## APXV34L24AV\_43-C-I20

### MECHANICAL SPECIFICATIONS

Length		mm (in)	2690 (105.9)
Width		mm (in)	396 (15.6)
Depth		mm (in)	160 (6.3)
Net Weight - Antenna Only		kg (lbs)	36.3 (80)
Net Weight - Mounting Hardware Only		kg (lbs)	7 (15.4)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf)	926 (208)
	Side	N (lbf)	464 (104)
	Rear	N (lbf)	1299 (292)
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
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in)	2980 x 520 x 294 (117.3 x 20.5 x 11.6)
	Shipping Weight	kg (lbs)	49.2 (108.5)

### 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.

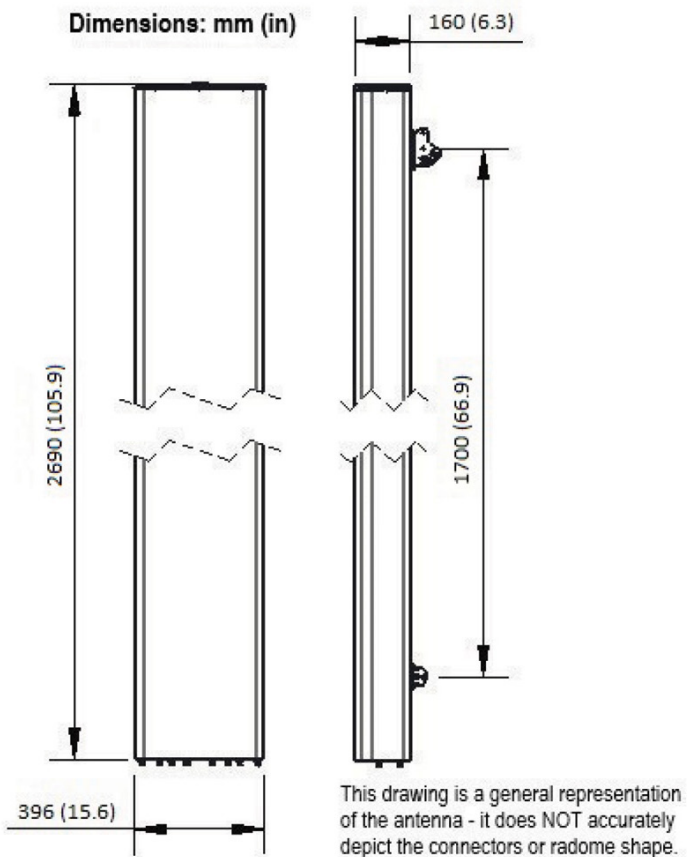
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-115 mm (2.0-4.5 in) <i>Shipped with antenna</i>	APM50-W5	7 kg (15.4 lbs)

### 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.
Inter-distance between both clamps of 8-port twin beam: < 1.8m
For additional mounting information, please check <b>External Document Links</b> .
For Radiating Patterns: <a href="#">Request pattern files</a>