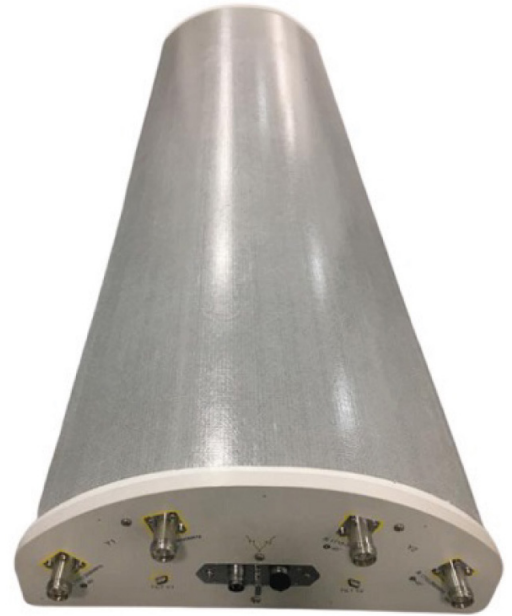


## APXV3LL14AS\_43-C-I20

### Features

- Twin beam antenna, 33°
- 2 ports + 2 ports, each 33° beam based on 1 cross pol system (1710-2690 MHz), separated by 60°
- Integrated and field replaceable SRET
- ACU HW Version: 2.02
- Compliant with AISG v2.0 and 3GPP



<b>PRODUCT OVERVIEW</b>	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	1290 x 396 x 160 mm (50.8 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
APXV3LL14AS_43-C-I20	ACU-I20-B2 Internal RET Included	APM50-W3 Included	50-115 mm (2.0-4.5 in)	32.9 kg (72.5 lbs)



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## APXV3LL14AS\_43-C-I20

### ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1710-2690		
		MHz	1710-2170	2300-2400	2490-2690
Polarization		---	±45°		
Gain	Over all Tilts	dBi	18.9 ± 1.1	20.1 ± 0.5	20.1 ± 0.7
	Max Gain	dBi	20	20.6	20.8
Azimuth Beamwidth (3 dB)		degrees	39.1° ± 5°	33.6° ± 1.5°	30.1° ± 1°
Elevation Beamwidth (3 dB)		degrees	7.7° ± 1°	6.1° ± 0.4°	6° ± 0.1°
Beam Center		degrees	±27°	±27°	±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	22.2	23	21
First Upper Side Lobe Suppression		dB	20	22	19.5
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

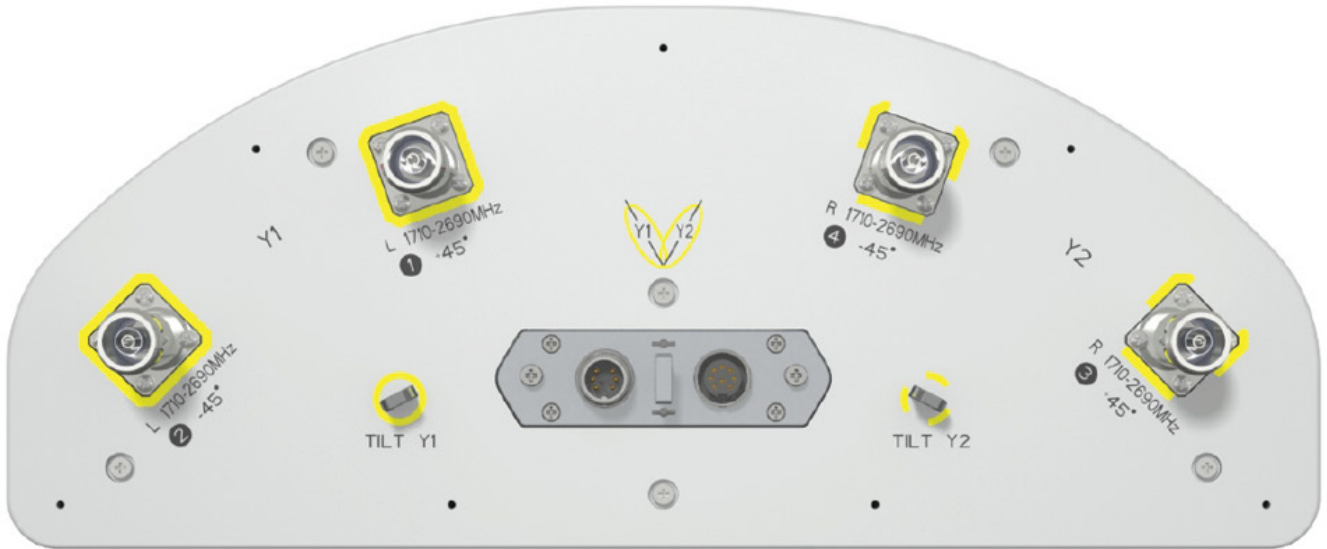
Frequency Range		MHz	1710-2690		
		MHz	1710-2170	2300-2400	2490-2690
Polarization		---	±45°		
Gain	Over all Tilts	dBi	19 ± 1.1	20.1 ± 0.5	20.1 ± 0.7
	Max Gain	dBi	20.1	20.6	20.8
Azimuth Beamwidth (3 dB)		degrees	39.1° ± 5°	33.6° ± 1.5°	30.1° ± 1°
Elevation Beamwidth (3 dB)		degrees	7.7° ± 1°	6.1° ± 0.5°	6° ± 0.1°
Beam Center		degrees	±27°	±27°	±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	23	23	20
First Upper Side Lobe Suppression		dB	21	21.7	18
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.

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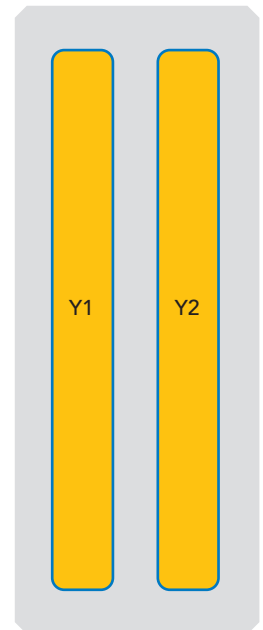
# APXV3LL14AS\_43-C-I20

## BOTTOM VIEW - LABELING

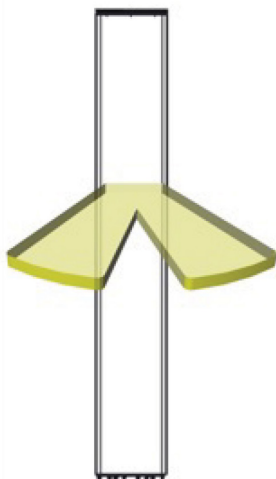


### ARRAY LAYOUT

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		



The illustration is not shown to scale.



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## APXV3LL14AS\_43-C-I20

### MECHANICAL SPECIFICATIONS

Length	mm (in)	1290 (50.8)
Width	mm (in)	396 (15.6)
Depth	mm (in)	160 (6.3)
Net Weight - Antenna Only	kg (lbs)	22.5 (49.6)
Net Weight - Mounting Hardware Only	kg (lbs)	4.5 (9.9)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 444 (100)
	Side	N (lbf) 222 (50)
	Rear	N (lbf) 623 (140)
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
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 1612 x 520 x 294 (63.5 x 20.5 x 11.6)
	Shipping Weight	kg (lbs) 32.9 (72.5)

### 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

## APXV3LL14AS\_43-C-I20

### 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

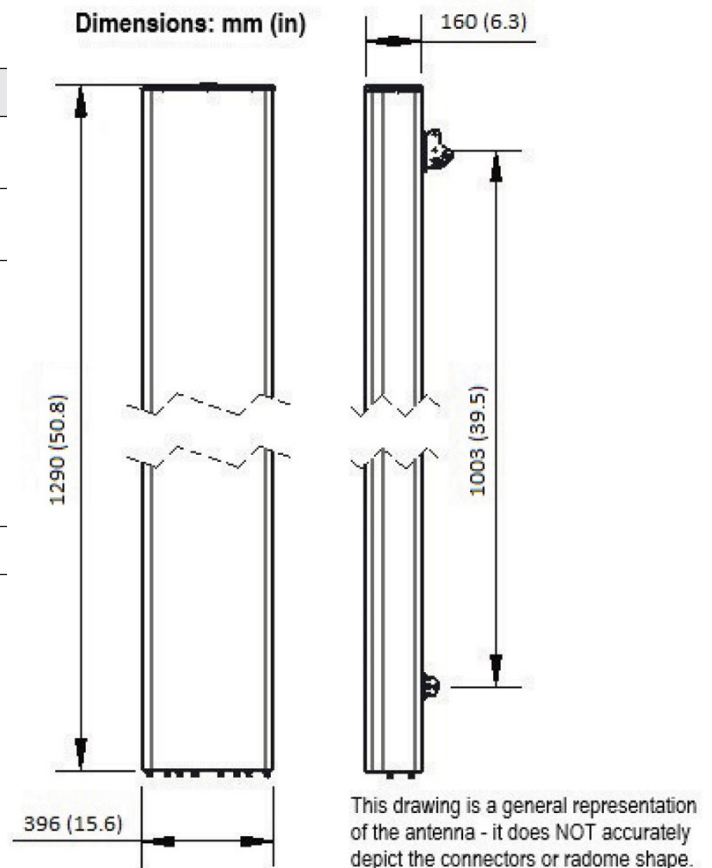
Please read all installation notes before installing product.



- 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](#)