

## APXVLL14H\_43-C-I20

### APXVLL14H\_43-A-I20



### Features

- 4 ports / 2 cross pol systems in high band (1695-2690 MHz)
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW version -HRLS200608H1.00
- Optional with Direct Pipe No Tilt mounting hardware (Model name Suffix -A-I20)
- Compliant with AISG v2.0 and 3GPP

<b>PRODUCT OVERVIEW</b>	Frequency Range (MHz)	(2x) 1695-2690	
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
		4 PORTS	
	Polarization	XPOL	
	Azimuth Beamwidth (avg)	65°	
	Electrical Downtilt	0-10°	
Dimensions	1378 x 258 x 88 mm (54.3 x 10.2 x 3.5 in)		

### ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXVLL14H_43-C-I20	ACU-I20-H12I Internal RET Included	APM50-H1 Beam Tilt Kit Included	50-125 mm (2.0-4.9 in)	16.0 kg (35.3 lbs)	4.0 kg (8.8 lbs)
APXVLL14H_43-A-I20	ACU-I20-H12I Internal RET Included	APM50-H1N Direct Pipe No Tilt Mounting Kit Included	50-125 mm (2.0-4.9 in)	15.0 kg (33.1 lbs)	3.0 kg (6.6 lbs)



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#### ELECTRICAL SPECIFICATIONS

■ Y1

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.7 ± 0.5	17.2 ± 0.5	17.8 ± 0.5	17.9 ± 0.5	18.0 ± 1.0
	Max Gain	dBi	17.2	17.7	18.3	18.4	19.0
Azimuth Beamwidth (3 dB)		degrees	66.6° ± 2.1°	64.5° ± 1.5°	63.9° ± 2.0°	64.0° ± 2.0°	57.1° ± 2.5°
Elevation Beamwidth (3 dB)		degrees	7.1° ± 0.5°	6.8° ± 0.5°	6.2° ± 0.5°	5.5° ± 0.5°	5.1° ± 0.1°
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	26	28	28	28	29
First Upper Side Lobe Suppression		dB	20	21	21	19.5	19
Cross Polar Discrimination Over Sector		dB	11	13	14	9	7
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	26	25.3	24	29	25
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

Specifications follow BASTA guidelines.

#### ELECTRICAL SPECIFICATIONS

■ Y2

Frequency Range		MHz	1695-2690				
		MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Polarization		---	±45°				
Gain	Over all Tilts	dBi	16.8 ± 0.5	17.3 ± 0.5	17.8 ± 0.5	18.0 ± 0.1	17.9 ± 0.5
	Max Gain	dBi	17.3	17.8	18.3	18.1	18.4
Azimuth Beamwidth (3 dB)		degrees	66.4° ± 3.0°	64.1° ± 2.0°	63.6° ± 2.0°	63.5° ± 1.5°	57.9° ± 3.0°
Elevation Beamwidth (3 dB)		degrees	7.2° ± 0.5°	6.8° ± 0.5°	6.1° ± 0.5°	5.5° ± 0.5°	5.0° ± 0.1°
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	26	29	29.9	28	27
First Upper Side Lobe Suppression		dB	20	20.8	20	18.4	18
Cross Polar Discrimination Over Sector		dB	11	12	15	9.9	8
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	24.5	26	25	27.4	26
Maximum Effective Power Per Port		Watts	250 W				
Cross Polar Isolation		dB	28				
Interband Isolation		dB	28				

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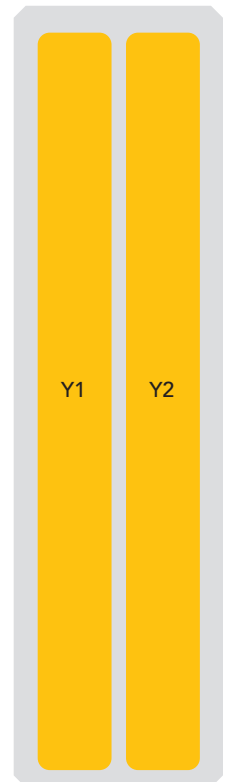
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#### BOTTOM VIEW - LABELING



#### ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ Y1	1695-2690 MHz	1-2	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxx-Y1
■ Y2	1695-2690 MHz	3-4	(2x) 4.3-10 Female	Y2	RFxxxxxxxxxx-Y2



The illustration is not shown to scale.

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#### MECHANICAL SPECIFICATIONS

Length	mm (in)	1378 (54.3)
Width	mm (in)	258 (10.2)
Depth	mm (in)	88 (3.5)
Net Weight - Antenna Only	kg (lbs)	10 (22)
Wind Load Rated at 150 km/h (93 mph)	Front	N (lbf) 435 (98)
	Side	N (lbf) 112 (25)
	Rear	N (lbf) 264 (59)
Survival Wind Speed	km/h (mph)	200 (124)
Connector Type	--	(4x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	UPVC
Lightning Protection	---	Direct Ground
<b>Shipping</b>	Packing Size (Length x Width x Depth)	mm (in) 1558 x 353 x 208 (61.3 x 13.9 x 8.2)

#### 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 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1	4.0 kg (8.8 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1N	3.0 kg (6.6 lbs)

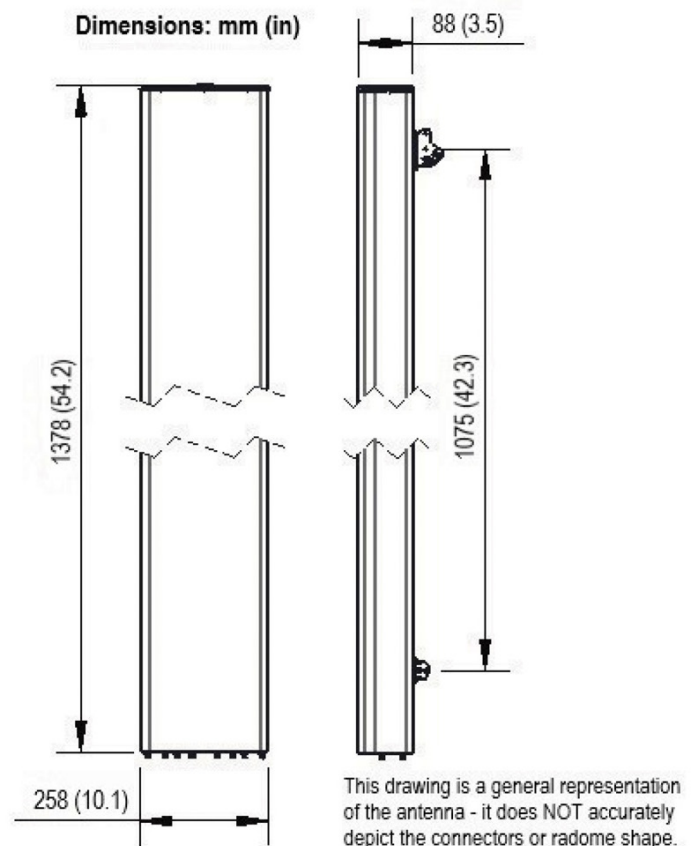
**INSTALLATION** Please read all installation notes before installing product.



- 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](#)

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