

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

PRODUCT OVERVIEW	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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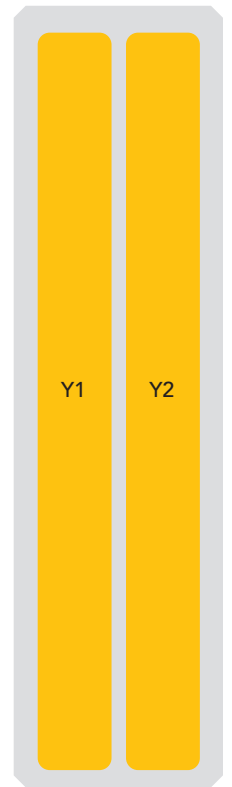
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BOTTOM VIEW - LABELING



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 / 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		---	UPVC
Lightning Protection		---	Direct Ground
Shipping	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.

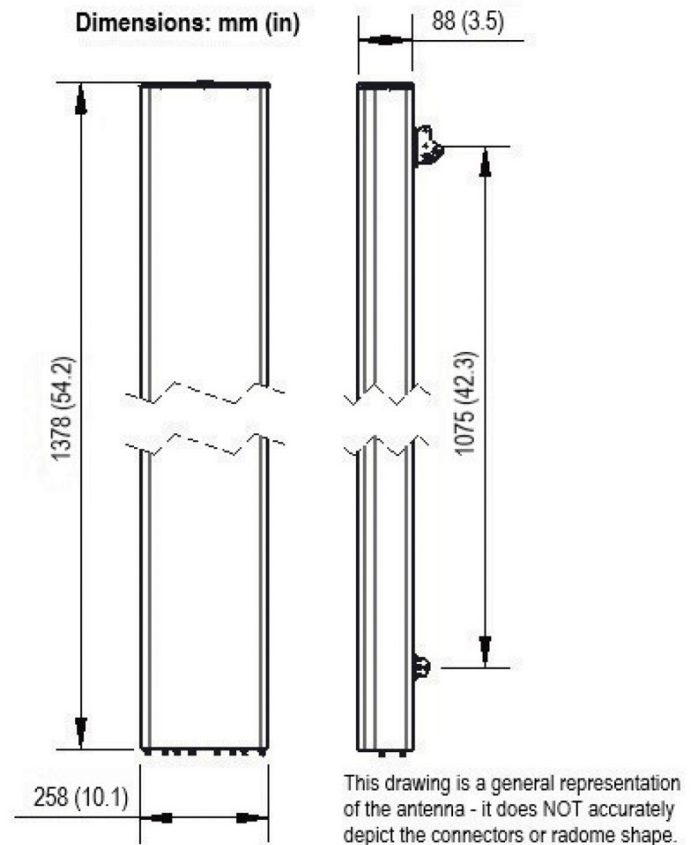
ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1	4.0 kg (8.8 lbs)
Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in) <i>Refer to ordering options</i>	APM50-H1N	3.0 kg (6.6 lbs)

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](#)